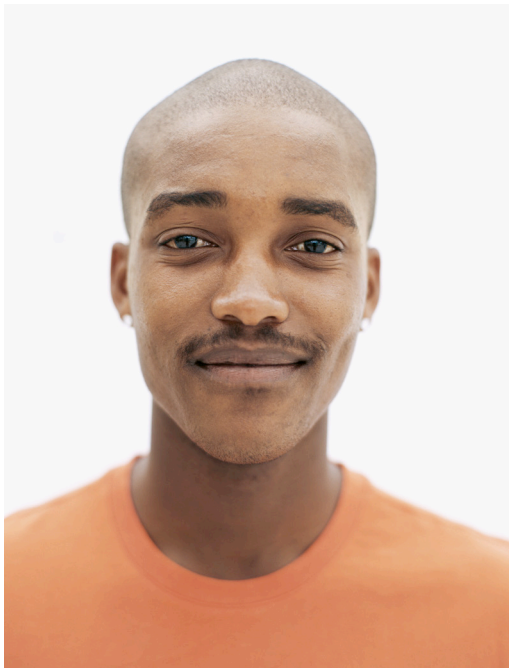
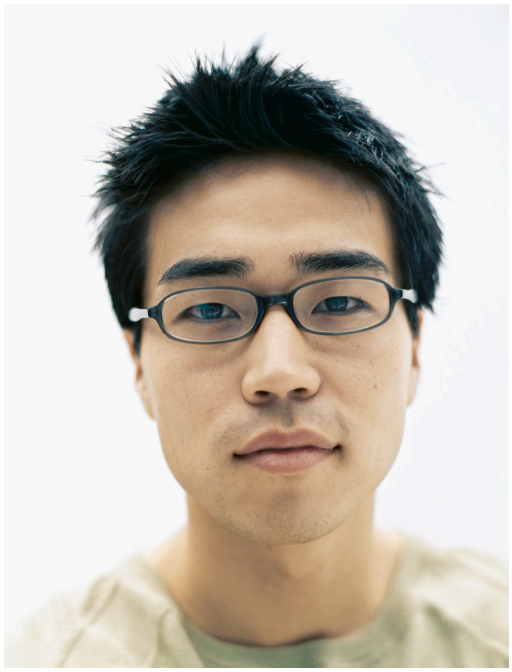
HIV Care Continuum Surveillance Report, Adults and Adolescents, Georgia, 2012

Georgia Department of Public Health



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https://dph.georgia.gov/georgias-hivaids-epidemiology-surveillance-section

For more information on HIV infection visit
https://dph.georgia.gov/what-hiv-and-aids or http://www.cdc.gov/hiv/

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Georgia HIV Core Surveillance team contributors: Marguerite Camp, Raimi Ewetola, Thelma Fannin, Denise Hughes, Rodriques Lambert, Sheila Maxwell, Mildred McGainey, Latoya Moss, A. Eugene Pennisi, Deepali Rane, Akilah Spratling, and Eina Walker

This report was prepared by the following staff of the Georgia Department of Public Health: Cherie Drenzek, Denise Hughes, Jane Kelly, Rodriques Lambert, A. Eugene Pennisi, Deepali Rane and Ty Weng.

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Background

In January 2013, the Centers for Disease Control and Prevention released HIV Surveillance Supplemental Report Volume 18, Number 2 *Monitoring Selected National HIV Prevention and Care Objectives by Using HIV Surveillance Data – United States and 6 U.S. Dependent Areas - 2010* [1]. The report provides data by selected jurisdiction on stage of disease at diagnosis of HIV infection in 2010, and on the HIV Care Continuum (previously called the HIV Care Cascade), i.e., linkage to and retention in care and viral suppression. These metrics can be used to monitor progress toward the achievement of objectives outlined in the National HIV/AIDS Strategy for the United States (NHAS), released by the White House in July 2010 [2]. While there is no consensus or "gold standard" for measures of linkage and retention in care, several measures for retention have been reported to correlate [3]. Selection of appropriate measures must take into consideration availability and accuracy of data collection systems, as well as potential uses of the metrics.

Since January 1, 2004, Georgia has a dual reporting system that legally requires HIV/AIDS reporting by both health care providers and laboratories (*O.C.G.A. §31-12-2(b)*). All health care providers diagnosing and/or providing care to a patient with HIV have the obligation to report the case using the HIV/AIDS Case Report Form. Case report forms are mandated to be completed within seven (7) days of diagnosing a patient with HIV and/or AIDS or within seven (7) days of assuming care of an HIV positive patient who is new to the provider, regardless of whether the patient has previously received care elsewhere. All laboratories certified and licensed by the State of Georgia are required to report laboratory test results indicative of HIV infection, such as positive Western Blot results, all detectable and undetectable viral loads, all CD4 counts, and all viral nucleotide sequence results to the Georgia Department of Public Health (GDPH) HIV/AIDS Epidemiology Program (HAEP) [4]. Appendix A depicts the Georgia HIV/AIDS Reporting Flowchart. Appendix B contains the Georgia DPH Case Report Form.

Recent improvements in the Georgia electronic laboratory reporting (ELR) system have facilitated use of laboratory-based measures for linkage and retention in care. Although other measures such as missed appointments, health care visit consistency, and gaps in care may be assessed at individual health care facilities, it is difficult to accurately gather these measures on a statewide basis in Georgia. For these reasons, Care Continuum measures in this report rely on laboratory data-driven definitions. In addition, multiple measures, such as linked to care within 3 months of diagnosis, minimally engaged in care (at least one CD4 or viral load in 12 months) as well as the HRSA medical visit performance measure (at least two CD4 or viral load measures at least three months apart within a 12 month period) [5] can be useful to various stakeholders in monitoring impact of effort to improve outreach, testing, and care.

Efforts are underway to promote HIV testing in Georgia, identify those with acute infection, link and retain persons living with HIV in medical care, achieve higher rates of viral suppression overall, and eliminate disparities in HIV testing, treatment and care. Late diagnosis of HIV infection contributes to poorer outcomes for infected individuals and impedes HIV prevention efforts. Earlier diagnosis provides opportunity for interventions for viral suppression for the benefit of the individual and for reduced HIV transmission for the benefit of the community. This report identifies sub-groups in Georgia with higher proportions of late diagnosis defined by earliest CD4 measure done within 12 months of diagnosis.

Commentary

This report is supplemental to the 2012 Georgia Department of Public Health HIV Surveillance Report which contains further information on demographics and distribution of new HIV diagnoses and persons living with HIV infection and AIDS in Georgia. Data on HIV infection in Georgia are also included in the CDC HIV Surveillance Report Volume 23, Diagnoses of HIV Infection in the United States and Dependent Areas, 2011.[6] Data included in the national report may differ from the Georgia report. CDC does not include cases reported in Georgia which are missing data on race or sex, whereas these cases are included in the Georgia surveillance reports.

Consistent with the CDC national surveillance reports, this report uses CD4 count and percent to define stage of disease (Stage 1, 2, 3 [AIDS] or unknown). In addition, data presented here refer to HIV infection (persons living with HIV infection regardless of CD4 count) and Stage 3 (AIDS), rather than presenting data on persons with HIV (not AIDS) and AIDS as was done in most previous Georgia reports. The term HIV infection, stage 3 (AIDS) and its condensed version – stage 3 (AIDS) – refer specifically to persons diagnosed with HIV whose infection was classified as stage 3 (AIDS) during a given year (for diagnoses) or whose infection has ever been classified as stage 3 (for prevalence and deaths) even if the individual's current CD4 count is >200.

Report Organization

The Georgia HIV Care Continuum Surveillance Report, 2012 is organized into six sections:

- **Section One** | Care Continuum for persons living with HIV, Georgia, 2012
- **Section Two** | Viral suppression for persons living with HIV, Georgia, 2012
- **Section Three** | HIV Care Continuum, new diagnoses, Georgia, 2011
- **Section Four** | Proportion of Viral Load (VL) <200, VL >200 and VL missing among persons living with HIV in Georgia in 2012
- **Section Five** | Proportion of VL <200, VL >200 and VL missing among persons diagnosed with HIV in Georgia in 2011
- **Section Six** | Stage of disease at diagnosis, new diagnoses, Georgia, 2011

Supplementary slide sets with speaker's notes are also available on the Georgia DPH website for the following:

- Care Continuum for persons living with HIV, Georgia, 2012
- Care Continuum, new diagnoses, Georgia, 2011
- Care Continuum , new diagnoses, Atlanta EMA, 2011
- Care Continuum, new diagnoses, Fulton County, 2011
- Care Continuum, new diagnoses, DeKalb County, 2011
- Multiple Imputation

Readers are encouraged to note all titles and footnotes carefully to ensure a complete understanding of displayed data.

Methodology

Georgia Care Continuum Methodology, Persons Living With HIV (PLWH), 2012

- Persons included are adults and adolescents age 13 and older, diagnosed by 09/30/11, living as of 12/31/12 with current residence in Georgia
- Linked to care data are not available for all PLWH and not included
- Engaged in care is defined as having had at least 1 CD4 or VL measurements in 2012
- Retained in care is defined as having had at least 2 CD4 or VL at least 3 months apart in 2012
- Estimated percentage prescribed ART is derived from the Medical Monitoring Project (MMP) Georgia sample
- Viral suppression (VS) is defined as a VL<200 copies/ml or undetectable in the most recent viral load
- Each bar in the cascade is independent of those preceding it; all percentages are of the total number of persons diagnosed with HIV in a category

Georgia Care Continuum Methodology, New Diagnoses, 2011

- Persons included are adults and adolescents age 13 years and older at the time of diagnosis, and who were diagnosed between 01/01/11 and 12/31/11; alive at least 15 months after HIV diagnosis, residence at diagnosis in Georgia
- Excluded are 52 persons who were deceased within 15 months of diagnosis in 2011
- Linked to care is defined as having had a CD4 or VL measurement within 3 months of diagnosis, excluding the CD4 or VL drawn on the day of diagnosis
- Engaged in care is defined as having had at least 1 CD4 or VL measurement 4-15 months after HIV diagnosis
- Retained in care is defined as having had at least 2 CD4 or VL measurements at least 3 months apart 4-15 months after HIV diagnosis
- The estimated percentage who were prescribed ART is derived from the Medical Monitoring Project (MMP) Georgia sample data
- Viral suppression (VS) is defined as a VL<200 copies/ml or undetectable in the most recent viral load
- Each bar in the cascade is independent of those preceding it; all percentages are of the total number of persons diagnosed with HIV in a category

Figures 1-3 Depict scenarios in the HIV Care Continuum for New Diagnoses 2011

HIV CARE CONTINUUM METHODOLOGY NEW DIAGNOSIS 2011 (FIGURES 1-3)

Figure 1 | In this example, the individual is diagnosed with HIV at the red circle in this figure. A CD4 or viral load (VL) is measured 2 months after diagnosis, and again at 6 months and 12 months after diagnosis. The last viral load is <200 copies/ml. This individual is linked, engaged, retained in care and virally suppressed.

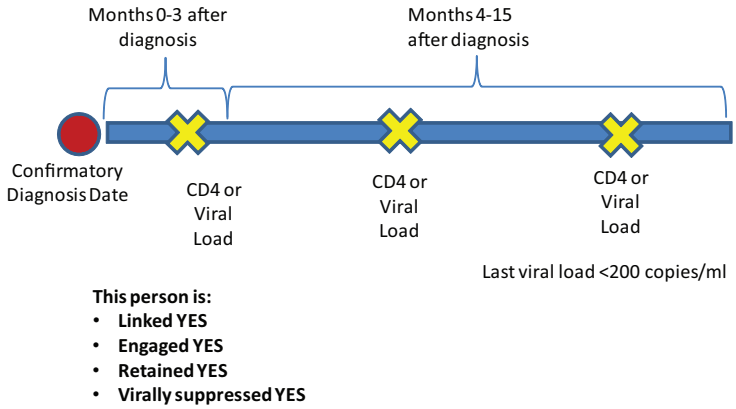


Figure 2 | In this example, the individual is diagnosed with HIV at the red circle in this figure. A CD4 or viral load (VL) is measured 2 months after diagnosis, and again at 9 months after diagnosis. The last viral load is undetectable. This individual is linked and engaged but not retained in care, although s/he is virally suppressed.

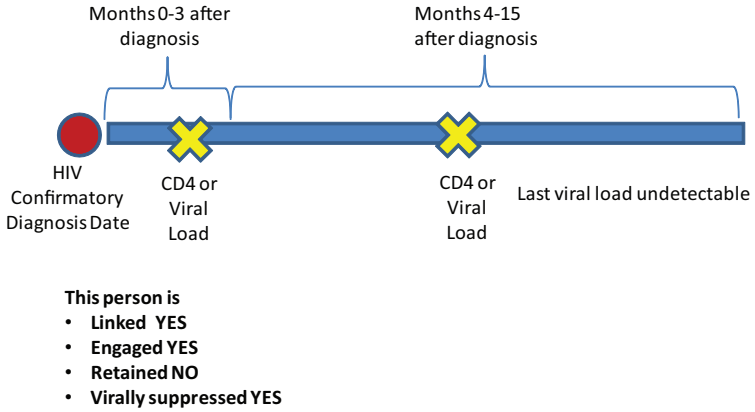
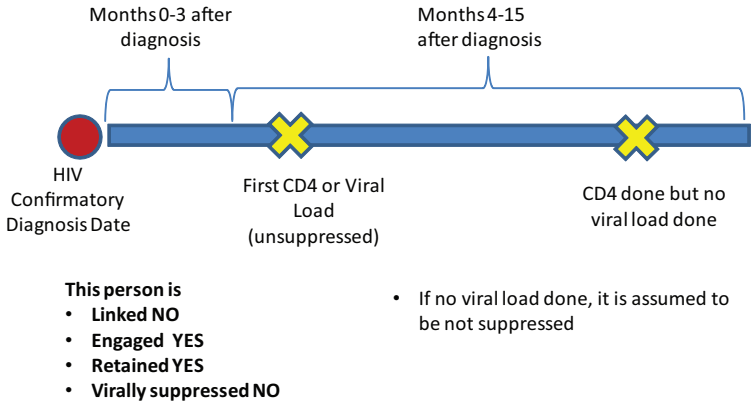


Figure 3 | In this example, the individual is diagnosed with HIV at the red circle in this figure. The first CD4 or viral load (VL) is measured 4 months after diagnosis, and the VL is >200 copies/ml. CD4 is measured at 12 months after diagnosis but the VL is not repeated. This individual is not linked, and although engaged and retained in care, s/he is not virally suppressed.



Transmission Category Definitions

- MSM is defined as male to male sexual contact
- IDU is defined as injection drug use
- The MSM/IDU transmission category includes those persons who reported both male to male sexual contact sexual contact and injection drug use
- HET is defined as heterosexual contact with a person known to have, or to be at high risk for, HIV infection
- Other includes the transmission categories of hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified

Multiple Imputations

Missing data is an ongoing problem in routinely collected data or large-scale epidemiologic studies. Because a substantial proportion of persons with diagnosed HIV infection are reported to the Georgia Department of Public Health without an identified risk factor, multiple imputation methods are used to assign transmission categories to those persons whose diagnoses are reported without a risk factor.

Multiple imputations (MI) is a statistical approach in which missing transmission categories for each person are replaced with plausible values that represent the uncertainty regarding the actual, but missing, values. This is the same statistical strategy that the CDC uses to assign transmission categories to those reported without a risk factor in the national dataset.[8]

Whether these transmission category adjustments using MI introduce any systematic bias in overestimation or underestimation of percentages of HIV infection attributed to specific categories is unknown. Instead of estimating the risk factor distribution probabilities for cases with missing risk factors by a simple redistribution approach, MI draws a random sample of the missing values from its distribution.

Then, instead of filling in a single value for each missing value, MI replaces each missing value with a set of plausible values that reserve the statistical distribution of the imputed variable and the relationship with other variables in the imputation model. The multiply-imputed datasets are then analyzed by using standard procedures for complete data. Results from these analyses are then combined to get the final estimates.

MI is considered a sound approach and the best choice for large datasets.[9]

In an analysis comparing the Care Continuum for the Georgia HIV prevalent population in 2012 stratified by transmission category estimated with and without use of MI, little difference was found, similar to the experience with the national dataset.[8] Specific examples can be found in the slide set "Multiple Imputation, Georgia 2012" found on the Georgia DPH website.

Summary of Methodology Changes in 2012 Care Continuum Report Compared to 2011

- The 2012 report contains only cases for whom current residence is in Georgia (for persons living with HIV) or for whom residence at diagnosis was Georgia (for new diagnoses, 2011). The 2011 report included a small number of cases for whom state of residence was missing.
- Linkage to care excludes CD4 or VL drawn on the day of diagnosis for the 2012 report.
- Engagement and retention in care are shown for both the prevalent population (persons living with HIV) and for those newly diagnosed in 2011 for the 2012 report.
- Individuals diagnosed in 2011 but deceased within 15 months of diagnosis are excluded in this analysis but were included in the 2011 report.
- The Care Continuum for persons diagnosed in 2011 is based on follow up for 15 months after diagnosis, rather than simply the following calendar year as in the 2011 report.

Highlights

HIV Care Continuum among persons living with HIV in Georgia, 2012

- Of persons living with HIV infection in Georgia, diagnosed by 2011 and alive by the end of 2012, fifty-four percent (54%) were minimally engaged in care (at least one CD4 or VL in 2011), 38% retained in care (at least two CD4 or VL at least 3 months apart in 2012) and 39% were virally suppressed (VL <200 copies/ml).
- If the national estimate of 18% undiagnosed is applied to Georgia, the proportion who were minimally engaged in care in 2011 decreases to 44%, retained to 31% and viral suppression to 32%.
- Little difference in the Care Continuum is noted among people living with HIV infection, stratified by sex, Georgia, 2012.
- Viral suppression is lowest among black males (35%) compared to Hispanic/Latino (37%), white (46%) and Other/Unknown race males (46%). Viral suppression varies little among women stratified by race.
- Viral suppression generally increases with increasing age especially among males (from a low of 28% among males age 13-24 years of age to a high of 43% among ages 44-54 and 39% among those age > 55).
- Little difference in viral suppression is seen for females by transmission category (39% HET and 37% IDU) whereas viral suppression is lowest for male IDU (31%) compared to MSM/IDU (36%), HET (37%), MSM (40%) and Other/Unknown (42%).

Viral suppression analysis among persons living with HIV, Georgia, 2012

- Viral suppression was greater for those retained in care (at least 2 CD4/VL measures in 2012) than those minimally engaged (at least 1 CD4 or VL in 2012) across all demographic categories examined.
- Even when controlled for engagement and retention in care, disparity in viral suppression by race persists. Among those retained in care, Black males are less likely to achieve viral suppression (73%) than Hispanic/Latino (79%) or White (87%) males. The disparity is less marked among women with 74%, 81% and 79% viral suppression for Black, Hispanic/Latino and White women respectively.
- Viral suppression is low for younger age groups even when retained in care with only 58% viral suppression among those aged 13-24 years. Viral suppression increases with increasing age to 86% for those aged 55+.
- The proportion of viral suppression among those retained in care varies little by transmission category.
- The Care Continuum can be used to examine disparities among groups stratified by multiple variables. For example, among Black MSM retained in care, viral suppression ranged from 51% for age 13-24 and increased with increasing age to 84% among those age 55 and older.
- Viral suppression on last viral load measured in 2012 among those engaged in care varies by diagnosis year from 72% (diagnosis year 2011) to 81% (diagnosis years 2000 and 2002).
- The average proportion of viral suppression among those engaged in care in 2012 is higher among those living longer with an HIV diagnosis (79% for those diagnosed during the years 2000-2005) than those more recently diagnosed (74% for those diagnosed during the years 2006-2011).
- Approximately half of persons living with HIV in Georgia in most demographic categories examined had no viral load measured in 2012, and are considered not suppressed in this analysis.
- Measured VL >200 (not suppressed) was higher among women (14%), Blacks (14%) and younger age groups (23% for age 13-24 years and 17% for age 25-34 years).

HIV Care Continuum among new diagnoses, Georgia, 2011

- Among the 2885 adults and adolescents diagnosed with HIV infection during 2011 living at least 15 months after diagnosis, 62% were linked to care within 3 months of diagnosis, 66% were minimally engaged in HIV care with at least one CD4 or VL 4-15 months after diagnosis, 46% retained in care (>= 2 CD4 or VL measures at least 3 months apart 4-15 months after diagnosis,), and 45% achieved viral suppression (last VL <200 copies/ml).
- Black males were less likely to be linked, engaged or retained in care than Whites or Hispanic/Latinos, but the greatest disparity in the Care Continuum was in viral suppression with only 35% of Black males with a VL < 200 on last measurement in 2012 as compared to 56% of Hispanic/Latinos, 55% of Whites and 57% of those with Other or Unknown race/ethnicity.
- Linkage to care within 3 months was higher for Black females (72%) than Black males (59%) as were retention in care (51% vs. 42%) and viral suppression (50% vs. 35%).
- In contrast Hispanic/Latino males had better linkage (72%), retention (56%) and viral suppression (56%) than Hispanic/Latino females (69%, 41%, and 53% respectively).
- White males had better linkage (73%), retention (52%) and viral suppression (55%) than White females (64%, 45%, and 47% respectively).
- Linkage, engagement, retention and viral suppression generally increased with increasing age with viral suppression ranging from 34% among age 13-24 years to 54% among age 45-54 years and 52% among age 55+.
- By transmission category among males, linkage ranges from 61% (MSM) to 75% (HET). Although retention in care varies less (42% for MSM/IDU to 48% for Other/Unknown), viral suppression ranges from 39% for MSM and MSM/IDU to 48% among HET and 58% for those in the Other/Unknown transmission category.

- There is less variation in the Care Continuum for women by transmission category with 71-75% linkage, 50-52% retention and 50-54% viral suppression except for those in the Other/Unknown transmission category with 50% linked, 32% retained and 42% viral suppression.
- Black MSM between the ages of 45-54 had the highest percentage of viral suppression (47%) among all Black MSM while those aged 13-24 had the lowest (26%).

Proportion of Viral Load (VL) <200, VL >200 and VL missing

- Viral suppression with a viral load undetectable or < 200 copies/ml was 39% for persons living with HIV in Georgia in 2012.
- The percent of measured VL >200 is highest (23%) among persons age 13-24 years, and decreases with increasing age to only 7% among those age 55 and older.
- Forty-nine percent of those living with HIV did not have a viral load measured in 2012 and were assumed to not be suppressed.
- The large proportion (47-55%) of unmeasured viral load is consistent across sex, race/ethnicity, age and transmission categories.
- In contrast, among persons diagnosed with HIV in 2011 unmeasured viral load was lower that for those living with HIV in all demographic groups.
- Among persons diagnosed with HIV in 2011, the proportion with no VL measured in 2012 was highest among Blacks (23%), MSM (23%) and age 13-24 years (25%).

Stage of disease at diagnosis among new diagnoses, Georgia, 2011

- Stage of disease by first CD4 count within 12 months of diagnosis is missing for 35% of persons diagnosed in Georgia in 2011, but at least 27% have stage 2 and 22% stage 3 disease (AIDS) at first CD4 measurement.
- At least 21% of men and 25% of women have stage 3 disease (AIDS) at or within 12 months of diagnosis.
- The highest proportion of late diagnosis (defined as stage 3 disease at or within 12 months of diagnosis) by race/ethnicity is seen among Hispanic/Latinos, among whom at least 35% have stage 3 disease (AIDS) on first CD4 within 12 months of diagnosis.
- By transmission category among males, at least 23% MSM, 46% IDU, 25% MSM/IDU and 46% HET have stage 3 (AIDS) disease at or within 12 months of diagnosis.
- By transmission category among females, at least 33% IDU and 28% HET have stage 3 (AIDS) disease by earliest CD4 within 12 months of diagnosis.

Viral suppression among those engaged in care, Georgia, 2012, by diagnosis year 2000-2011

- Viral suppression on the last viral load measured in 2012 among those engaged in care varies by diagnosis year from 72% (diagnosis year 2011) to 81% (diagnosis years 2000 and 2002).
- The average proportion of viral suppression among those engaged in care in 2012 is higher among those who have lived longer with an HIV diagnosis (79% for those diagnosed during the years 2000-2005) than those more recently diagnosed (74% for those diagnosed during the years 2006-2011).

Technical Notes

This report includes data reported to Georgia DPH HAEP from January 1, 2004 (when name-based HIV reporting began in Georgia) through June 30, 2013.

All data reported here are provisional and should be interpreted with caution. Not all HIV infected persons in Georgia have been tested or some may have been tested at a point too early in infection to be detected by the test used. Although HIV reporting is mandated for health care providers and laboratory facilities, not all providers and laboratories may comply, resulting in missing data. Laboratory tests performed in other jurisdictions may not be reported to GDPH and therefore would not be included in these analyses.

In this report, missing data are indicated as unknown. Missing data may result from incomplete or absent Adult Care Report Forms, inadequacy of records for patients lost to follow-up, or patients accessing HIV treatment from health care systems outside Georgia. Follow-up of missing data cases is ongoing.

CDC included 14 jurisdictions in its HIV Surveillance Supplemental Report Volume 18, Number 2 that met the following criteria: (1) laws/regulations requiring the reporting of all CD4 and viral load measures. (2) a minimum of 95% of laboratories that perform HIV-related testing send laboratory reports to the jurisdiction and (3) that by December 2011, the jurisdiction had reported all CD4 and viral load results to CDC since at least January 2009. Although Georgia did not meet these criteria and therefore was not included at the time this report was written, advances in electronic laboratory reporting and eHARS database management at Georgia DPH have enabled this analysis.

Data are missing for some variables such as race, sex and transmission category. CDC requirements for inclusion in the national dataset include race and sex. Hence, the numbers of HIV-infected persons described in this Georgia Surveillance Report differs from those provided in the national reports produced by CDC. In Georgia DPH HIV Surveillance Reports through 2010, only cases for which complete case information was ascertained and reported to CDC were included. The decision at Georgia DPH to include in this report cases for which some variables are missing is predicated on the concept that this analysis, albeit incomplete, is important for data-driven decision-making, and to systematically under-report numbers of HIV infected does a disservice to Georgia HIV prevention and treatment efforts.

Definitions and hierarchy for assignment of transmission category follows the definitions used by CDC [7]. Data by transmission category were statistically adjusted using multiple imputation method to account for missing risk factor information. Data referring to diagnoses of HIV infection and persons living with HIV infection include all persons with HIV infection regardless of stage of disease (Stage 1, 2, 3 [AIDS] or unknown) at the time of diagnosis.

New diagnoses of HIV infection do not represent incidence or new infection as HIV infection may be present for years before diagnosis. For the majority of figures and graphics in this report, data are reported on known cases reported to Georgia DPH and entered into the eHARS data base. As the proportion of undiagnosed persons living with HIV is not known in Georgia, this report does not provide estimates for the undiagnosed in most figures. The one exception is Figure 4 in which the HIV Care Continuum for the known cases and a comparable continuum applying the national estimate for undiagnosed to the Georgia population are provided.

Notes:

- Linked to care (CD4 or VL within 3 months of diagnosis) cannot be estimated accurately with prevalent population as name-based reporting for HIV began in Georgia in 2004 and data are missing prior to this year.
- Because ART is an estimate based on a small sample of individuals living with HIV in Georgia, estimates for ART use are included only in Figures 4 and 27.
- Very few individuals are reported in the transgender category in Georgia. Efforts are underway to improve data collection on gender.
- Less than 1% of the prevalent population with HIV in Georgia are American Indian/Alaska Native, Asian or Native Hawaiian/Other Pacific Islander. In this report, these groups are included in the category Other/Unknown. Efforts are underway to create a separate report on these populations in Georgia.
- Because transmission category is not reported for a large proportion of HIV cases in Georgia, multiple imputation was used to re-distribute transmission category where it was missing. This statistical technique is the same as that used by CDC in re-distribution of transmission category in the national dataset.

Limitations

Limitations to this report include:

- Incomplete reporting on case report forms on race, sex, complete address at diagnosis and risk behavior (which is used in defining transmission category) limit stratification and comparison among groups.
- Lack of transmission category information obtainable from medical record abstraction
- Cases missing address information may not be reviewed via the Routine Interstate Duplication Report (RIDR) system if missing race/ethnicity, sex, or state at diagnosis
- The high proportion of missing risk behavior information on case report forms limits comparisons among groups. Rather than presenting the data as No Reported Risk for these cases, Georgia utilizes multiple imputation, a statistical technique, to re-distribute missing information and estimate transmission category.
- The CDC definition of heterosexual transmission limits this category to those with sexual contact with a known HIV-infected partner or those with known increased risk (e.g., MSM or IDU). For example, women who have had heterosexual contact with a man not known to be HIV-infected, bisexual or IDU will be classified as having no identified risk.
- Populations for which data are missing may be fundamentally different from other groups for which race, sex and transmission category are known
- CD4 or viral load is used as a proxy measure for linkage, engagement and retention in care
- Missing laboratory report data do result in an underestimation of care and viral suppression.

Despite these limitations, by maintaining methodological consistency across reporting time periods, Georgia DPH hopes to use HIV Care Cascades to monitor improvements in HIV linkage, retention in care and ultimately viral suppression.

Section One

Care Continuum among persons living with HIV, Georgia, 2012

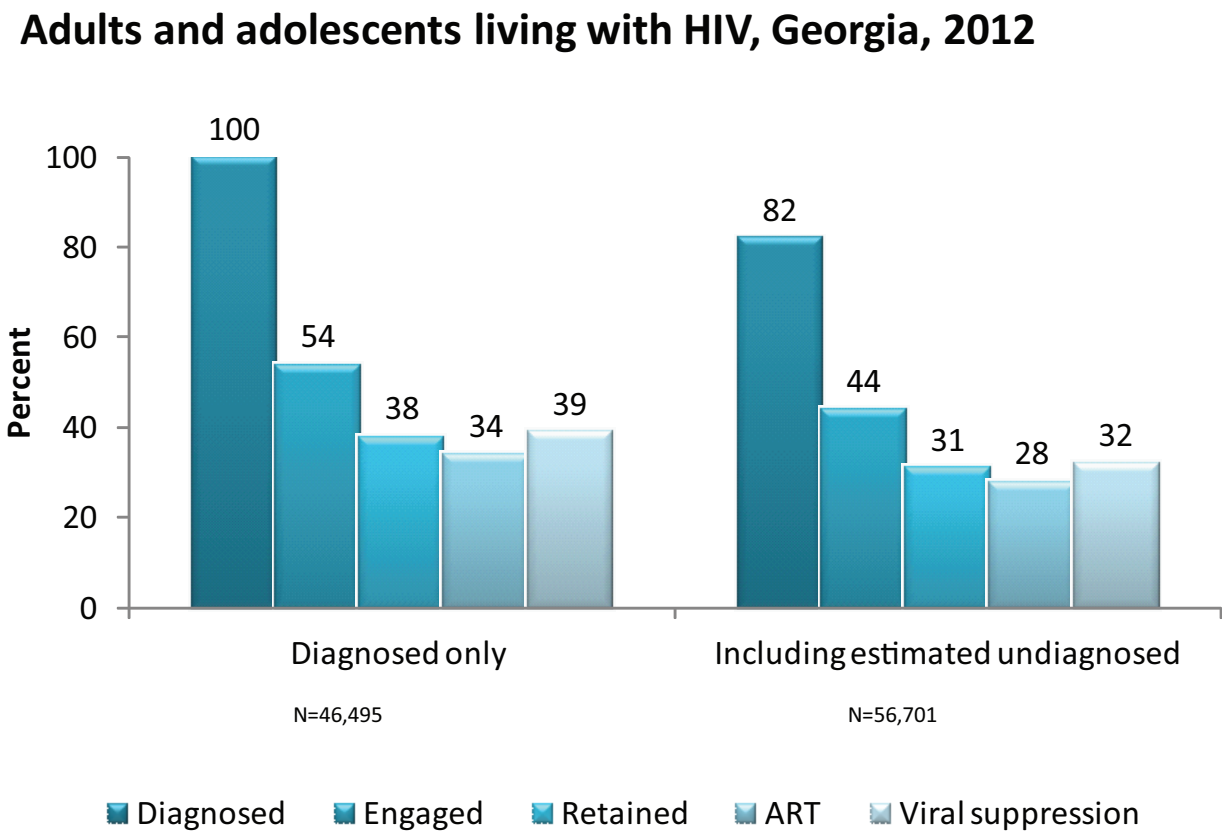


Figure 4 | The bar graph on the left side of this figure depicts the HIV Care Continuum for the 46,495 adults and adolescents diagnosed with HIV infection through September 30, 2011, living as of 12/31/2012, with current residence in Georgia. The proportion of persons on ART is based on estimation from the sample enrolled in the Medical Monitoring Project (MMP) in Georgia. Subsequent figures omit ART estimates while a better source of such data is sought. Note that all proportions are percent of total number of persons diagnosed with HIV in category. Each bar is independent of the one preceding it.

Note | The bar graph on the right shows the corresponding proportions if the CDC's national estimate of 18% undiagnosed were applied to Georgia. Since the percent undiagnosed is not known for Georgia, subsequent figures focus on the diagnosed population only.

Figure 5 | Among the 34,510 males, 54% were minimally engaged, 38% retained, and 39% virally suppressed. These figures are similar for the 11, 715 females living with HIV in Georgia with 55% engaged, 37% retained and 38% viral suppression. This figure excludes 270 cases for whom sex was not reported.

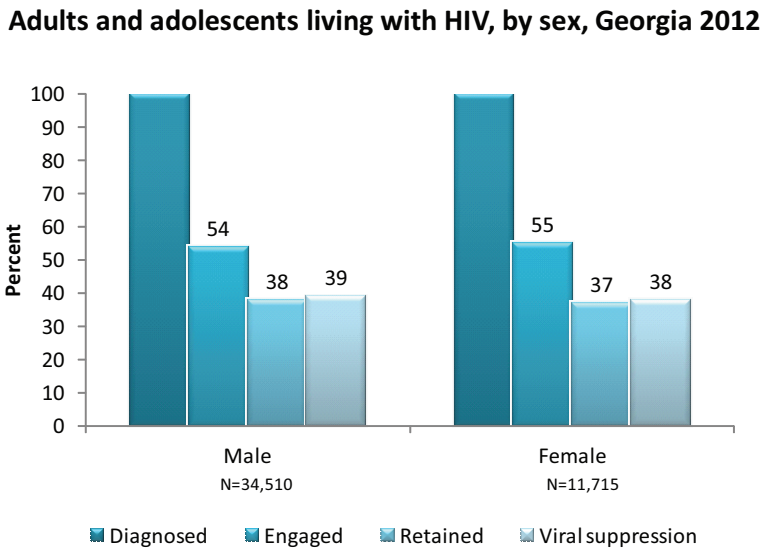
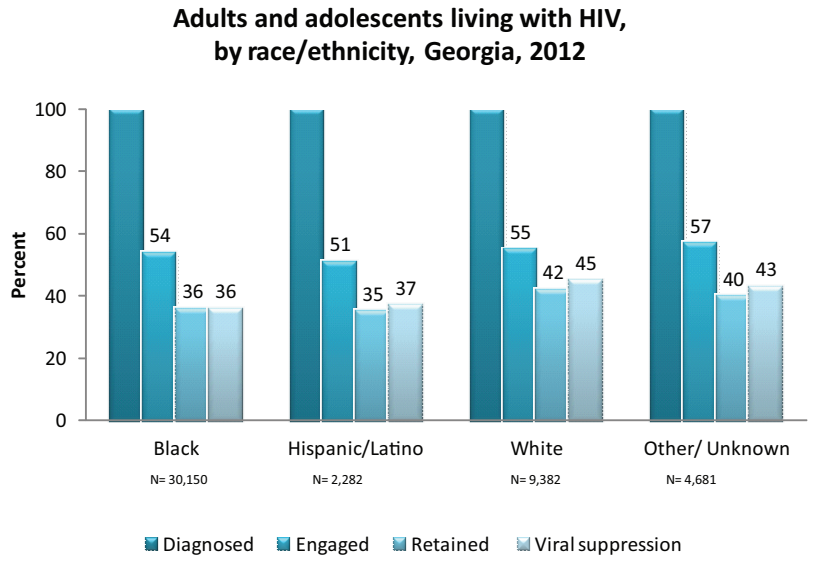
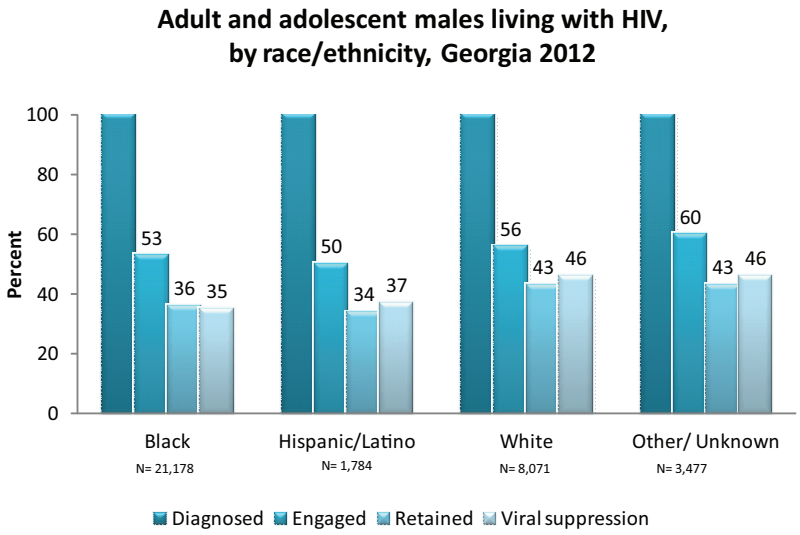


Figure 6 | Among 30,150 Blacks, 54% were engaged, 36% retained and 36% virally suppressed. Among 2,282 Hispanic/Latinos, 51% were engaged, 35% retained and 37% virally suppressed. Among 9,382 Whites, 55% were engaged, 42% retained and 45% virally suppressed. Among 4,681 persons in the Other/ Unknown Race category, 57% were engaged, 40% retained and 43% virally suppressed.



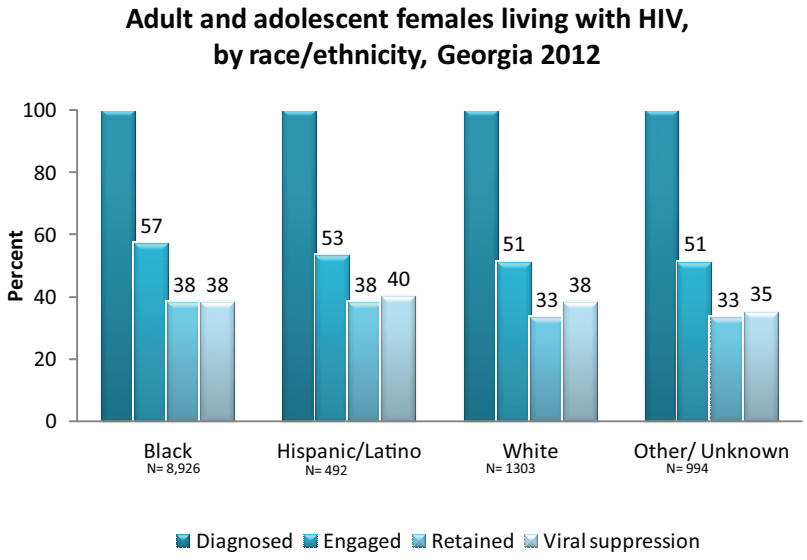
Note | Because American Indian/Alaska Native, Asian, and Native Hawaiian/Other Pacific Islanders combined equal <2% of new diagnoses in Georgia, these groups are included in Other/Unknown category shown to the far right on this slide. Race was not reported for the great majority of persons included in this category. Complete reporting including race, sex, and transmission category is critical to HIV surveillance and identification of health care disparities.

Figure 7 | Among 21,178 Black males, 53% were engaged, 36% retained and 35% virally suppressed. Among 1,784 Hispanic/Latino males, 50% were engaged, 34% retained and 37% virally suppressed. Among 8,071 Whites, 60% were engaged, 43% retained and 46% virally suppressed. Among 3,477 persons in the Other/ Unknown Race category, 60% were engaged, 43% retained and 46% virally suppressed.



Note | Race was not reported for the great majority of persons included in the Other/Unknown category.

Figure 8 | Among 8,926 Black females, 57% were engaged, 38% retained and 38% virally suppressed. Among 492 Hispanic/Latino females, 53% were engaged, 38% retained and 40% virally suppressed. Among 1,303 White females, 51% were engaged, 33% retained and 38% virally suppressed.. Among 994 persons in the Other/ Unknown Race category, 51% were engaged, 33% retained and 35% virally suppressed.



Note | Race was not reported for the great majority of persons included in the Other/Unknown category.

Figure 9 | Viral suppression generally increases among males with increasing age from 28% among those aged 13-24 years to 43% among those aged 45-54. The greatest drop-off in the Care Continuum is seen in the youngest age group with 57% engaged but only 28% virally suppressed.

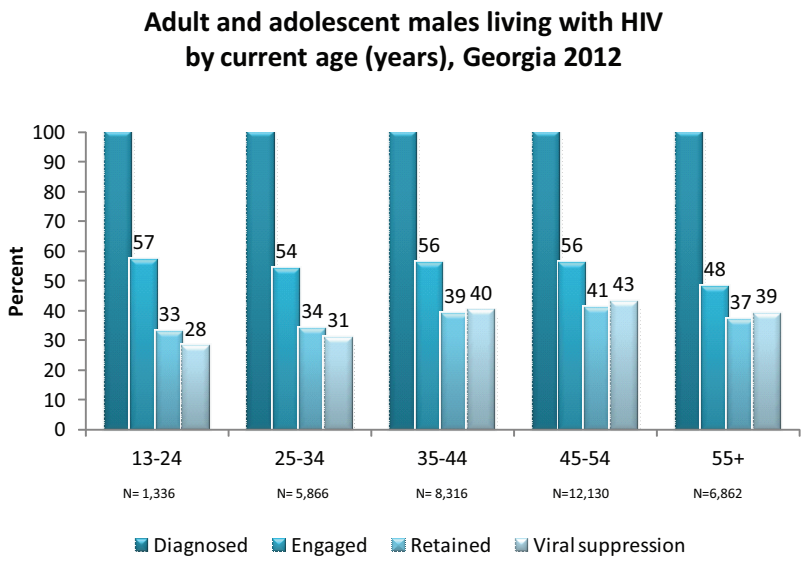


Figure 10 | Among females living with HIV in Georgia 2012, engagement, retention and viral suppression were lowest for those aged 25-34 (28%). With the exception of this age group, viral suppression generally increases with increasing age to a high of 43% for those aged 55 years and older.

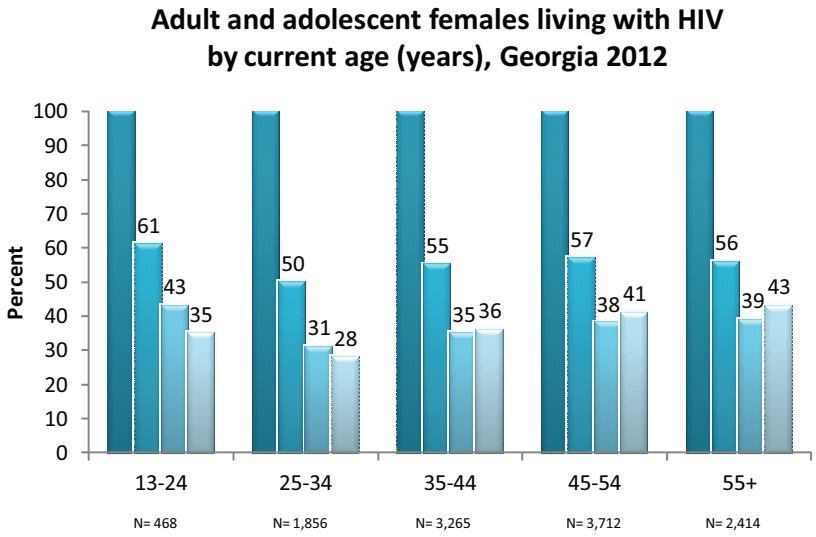
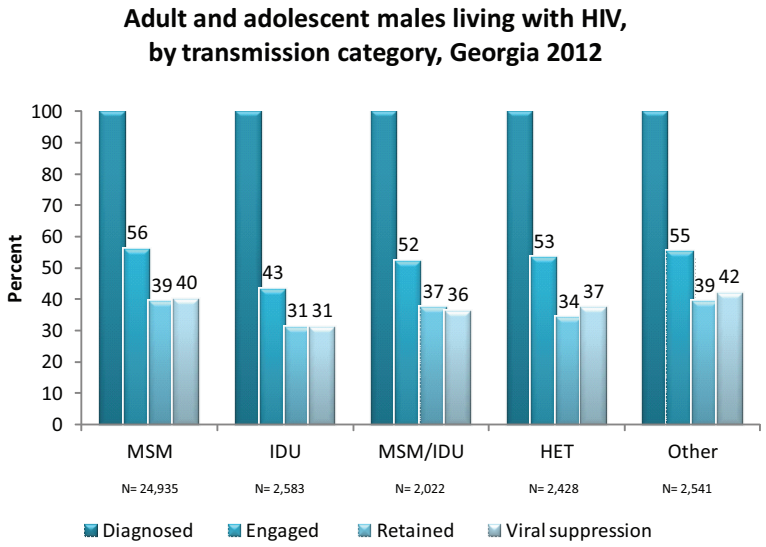
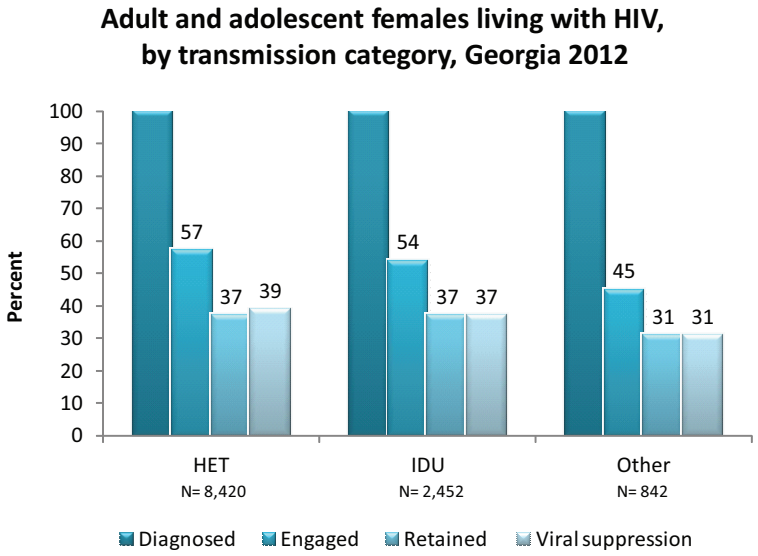


Figure 11 | Viral suppression is lowest among IDU (31%) and higher among MSM/IDU (36%), HET (37%), and MSM (40%). Although the Other transmission category has the highest proportion of viral suppression (42%), this is difficult to interpret as no transmission category information was reported on most of the cases in this group.



Note | Complete reporting of risk information on case report forms would improve our understanding and interpretation of the care continuum. Multiple imputation is used to estimate number of persons in each transmission category. Estimates are rounded to the nearest whole number and when totaled may not equal 34,510.

Figure 12 | Viral suppression is similar among IDU (39%) and HET (37%) for females. Although the Other transmission category has the lowest proportion of engagement, retention and viral suppression, this is difficult to interpret as no transmission category information was reported on most of the cases in this group.



Note | Multiple imputation is used to estimate number of persons in each transmission category. Estimates are rounded to the nearest whole number and when totaled may not equal 11,715.

Figure 13 | Among Black MSM living with HIV, engagement is care is similar for ages 35-54 to 54-57%, with somewhat lower (49%) engagement for those age 55 years and older. Viral suppression is lowest at 25% for the youngest age group (age 13-24 years), and generally increased with increasing age to 40% for age 45-54 years and 39% for age 55 years and older.

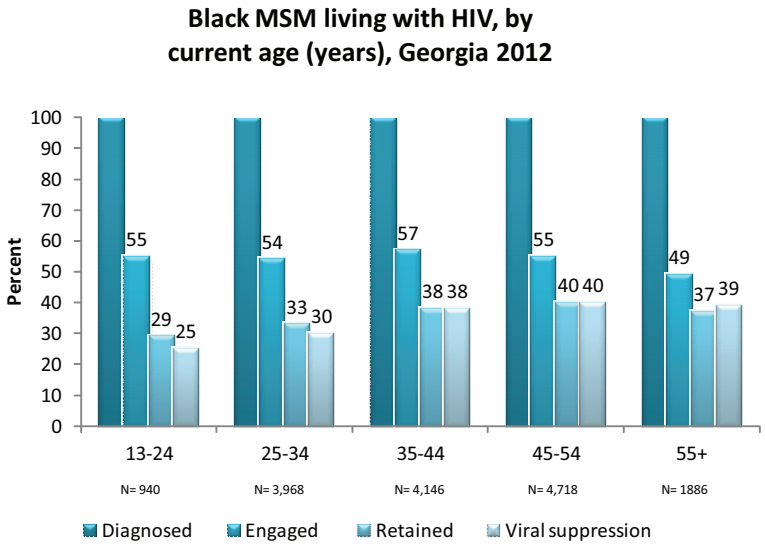


Figure 14 | Among White MSM, engagement is similar across age groups at 56-60% for ages 13-54, and somewhat lower (51%) for those aged 55 years and older. Viral suppression is lowest among those aged 13-24 years at 35% and generally increases with increasing age to 47% for age 45-54 and 45% for age 55 years and older.

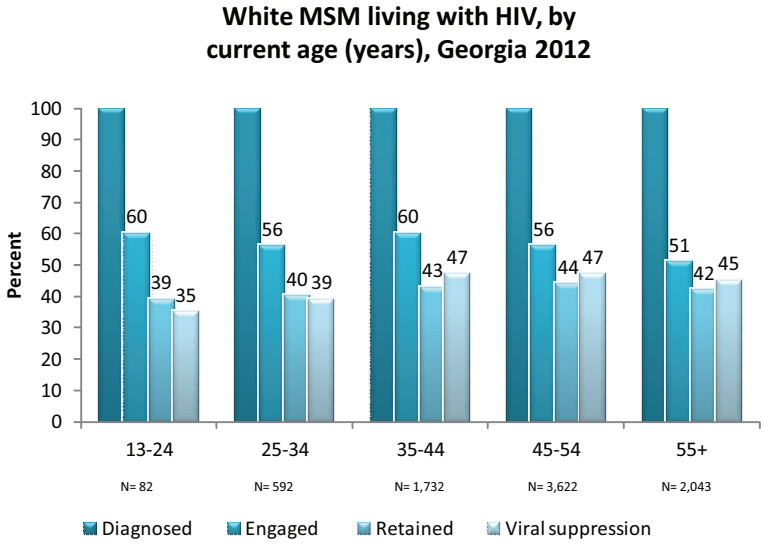
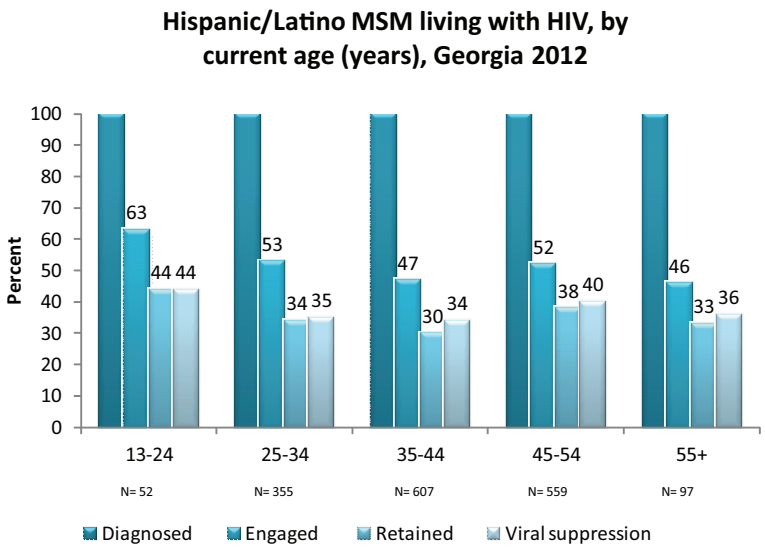
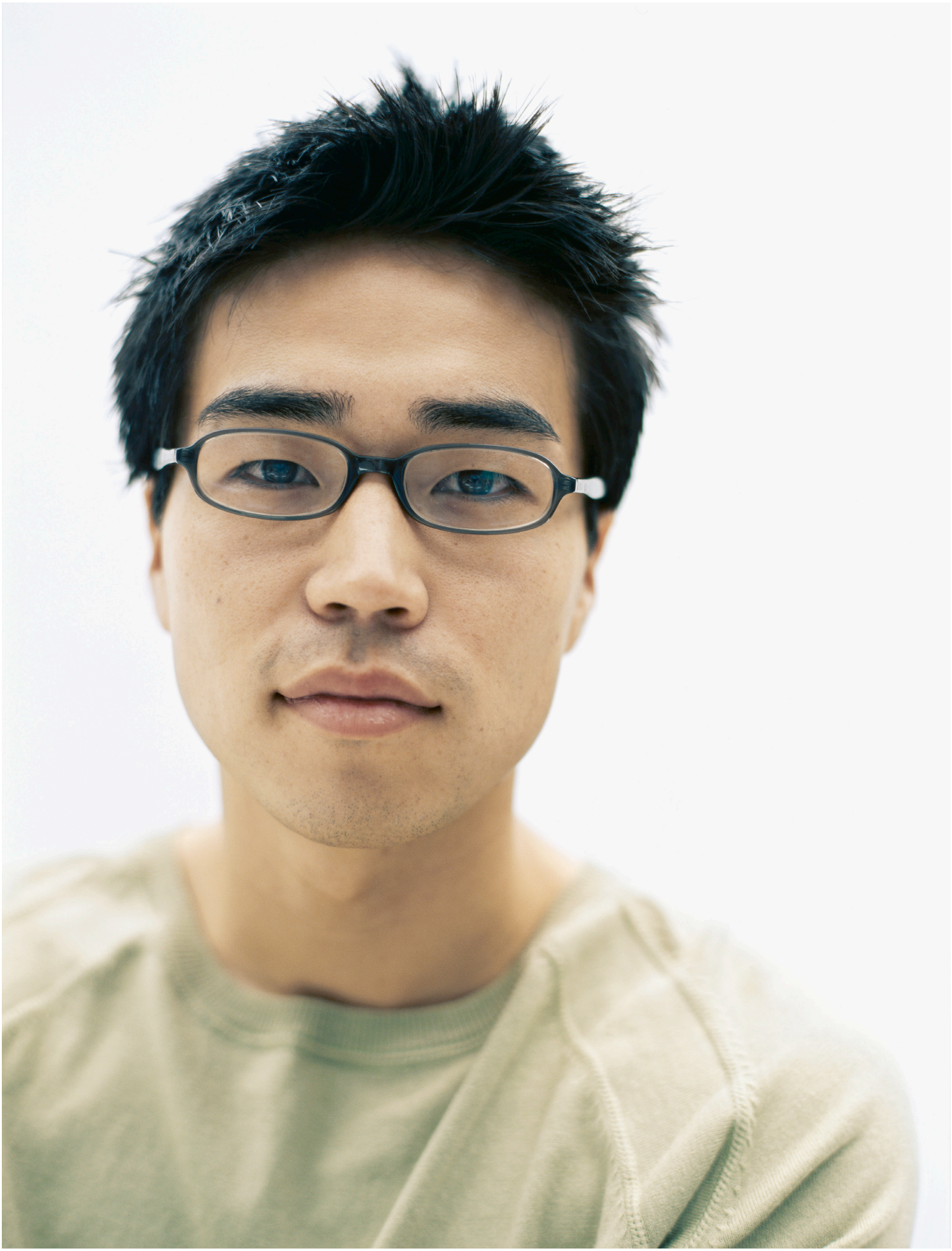


Figure 15 | In contrast to Black and White MSM living with HIV in Georgia, among Hispanic/Latino MSM, the trend of increasing proportion of viral suppression by increasing age is not seen, and it is the youngest age group that has the highest proportion of viral suppression (44%).



Note | The number of individuals in some groups is small and caution should be used in interpretation.

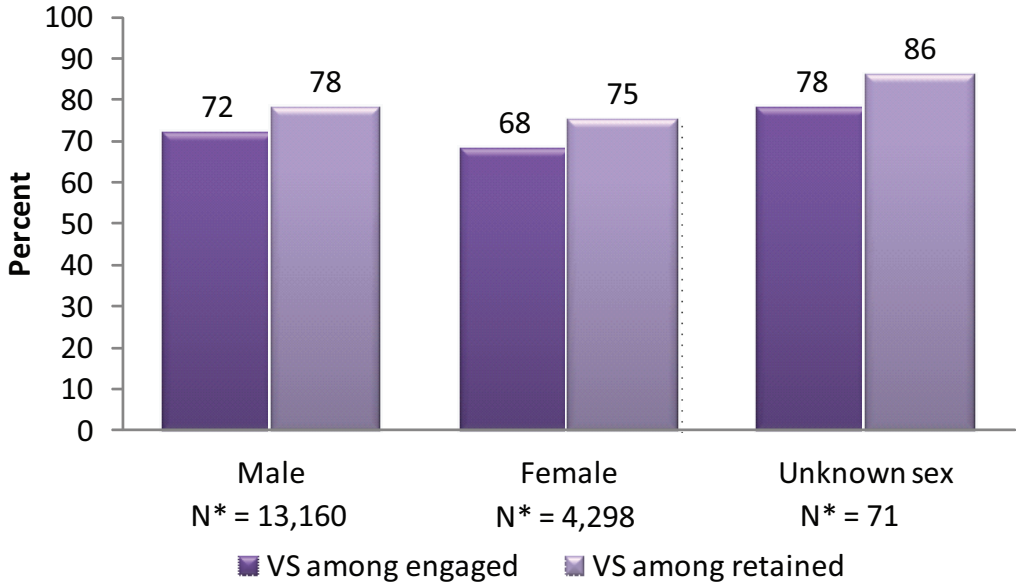


Section Two

Viral suppression among persons living with HIV, Georgia, 2012

Low proportions of viral suppression may reflect differences in engagement and retention in care, treatment with and adherence to ART, or missing data. In the preceding analysis, if no viral load for 2012 is reported to the Georgia Department of Public Health, the individual is assumed to be not virally suppressed. It is helpful to eliminate from the analysis those for whom data are missing, and examine the proportion of viral suppression among persons engaged and retained in care

Viral suppression (VS) among adults and adolescents engaged and retained in care, by sex, Georgia 2012



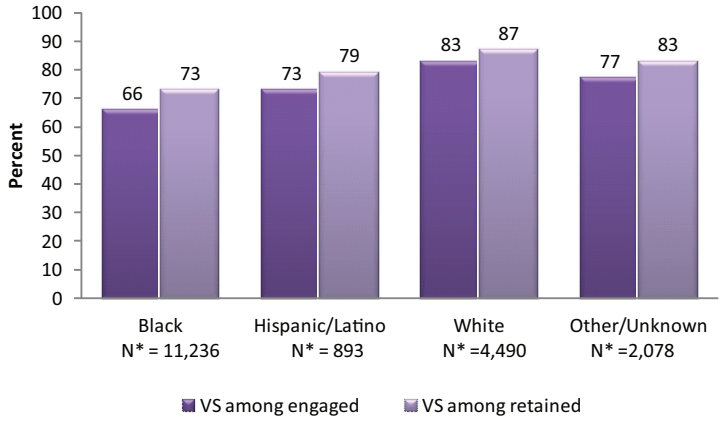
*N= number retained in care

Figure 16 | In Georgia 2012, viral suppression was higher for those retained in care (at least 2 CD4 or VL tests in 2012) than those engaged (at least 1 CD4 or VL in 2012) across all demographic groups. In Georgia, 78% of males and 75% of females retained in care were virally suppressed. Viral suppression was highest for those retained in care but for whom sex was not reported.

Figure 17 | Among those retained in care, Black males are less likely to be virally suppressed (73%) than Hispanic/Latino (79%) or White (87%) males. Among males for whom race was not reported, viral suppression was 83% for those retained in care.

Note | The disparity in viral suppression by race is not simply a function of access to care and retention in care as all of the individuals included in this analysis were in care.

Viral suppression (VS) among adult and adolescent males engaged and retained in care, by race/ethnicity, Georgia 2012

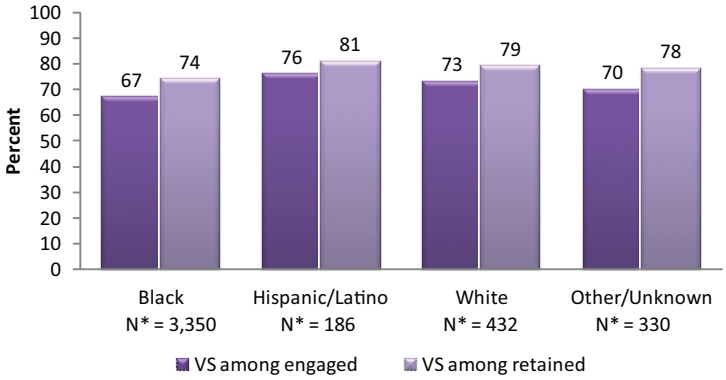


*N= number retained in care

Figure 18 | Among those retained in care, Black females are less likely to be virally suppressed (74%) than Hispanic/Latino (81%) or White (79%) females. Among females for whom race was not reported, viral suppression was 78% for those retained in care.

Note | Improved case reporting including race, sex and transmission category would improve our understanding of the care continuum.

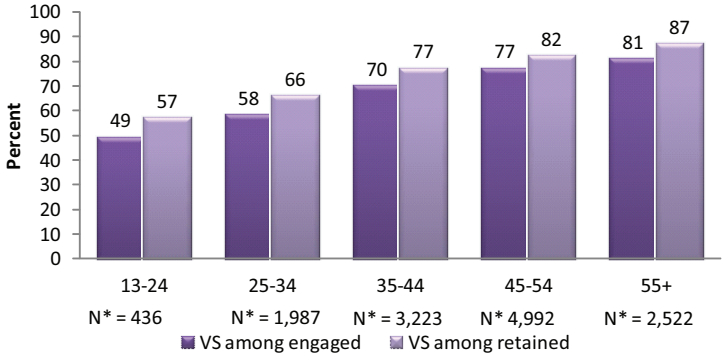
Viral suppression (VS) among adult and adolescent females engaged and retained in care, by race/ethnicity, Georgia 2012



*N= number retained in care

Figure 19 | Viral suppression increased with increasing age among adult and adolescent males retained in care in 2012 from 57% for those currently aged 13-24 to 87% for those currently aged 55+ years.

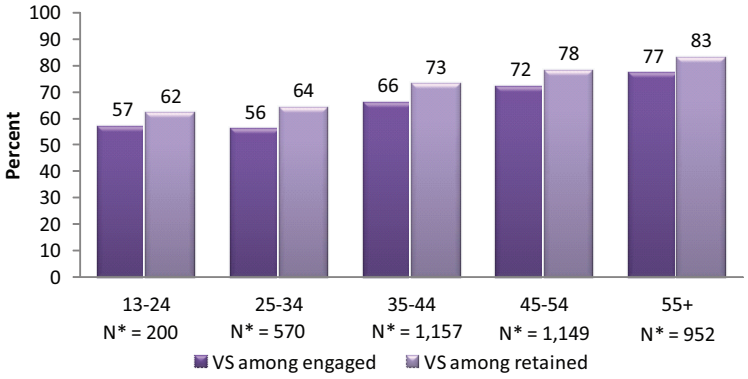
Viral suppression (VS) among adult and adolescent males engaged and retained in care, by current age (years), Georgia 2012



*N = number retained in care

Figure 20 | Viral suppression increased with increasing age among adult and adolescent females retained in care in 2012 from 62% for those currently aged 13-24 to 83% for those currently aged 55 years and older.

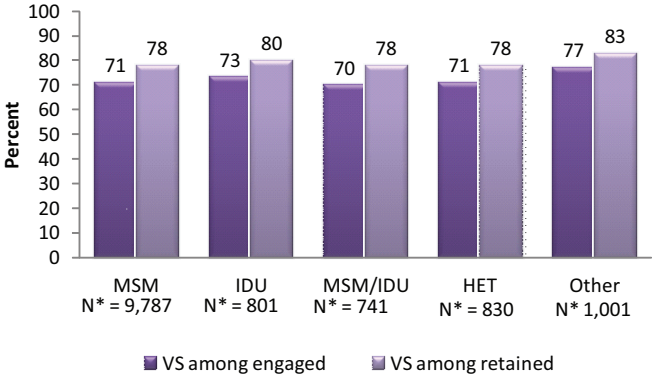
Viral suppression (VS) among adult and adolescent females engaged and retained in care, by current age (years), Georgia 2012



*N= number retained in care

Figure 21 | The proportion of viral suppression among males retained in care varies little by transmission category. Viral suppression was 78% for MSM, MSM/IDU and HET, 80% for IDU and 83% for those in the Other transmission category.

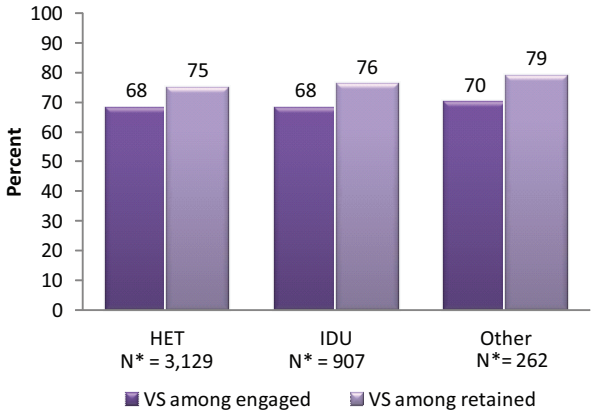
Viral suppression (VS) among adult and adolescent males engaged and retained in care, by transmission category, Georgia 2012



*N= number retained in care;

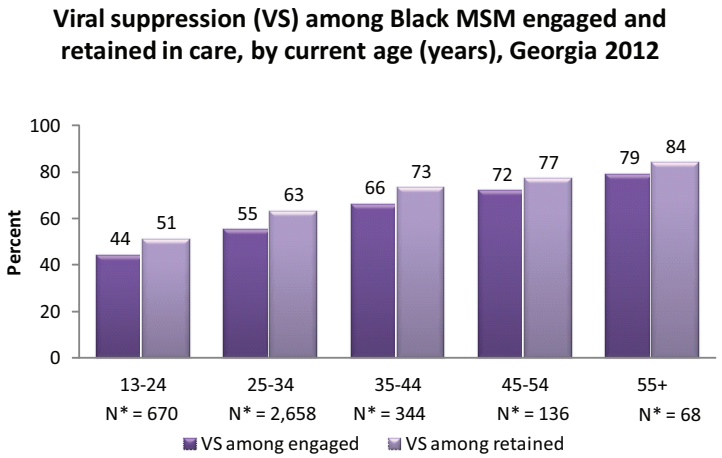
Figure 22 | Among women retained in care, viral suppression varies little by transmission category with viral loads <200 in 75% of HET, 76% of IDU and 79% of those in the Other transmission category.

Viral suppression (VS) among adult and adolescent females engaged and retained in care, by transmission category, Georgia 2012



*N= number retained in care

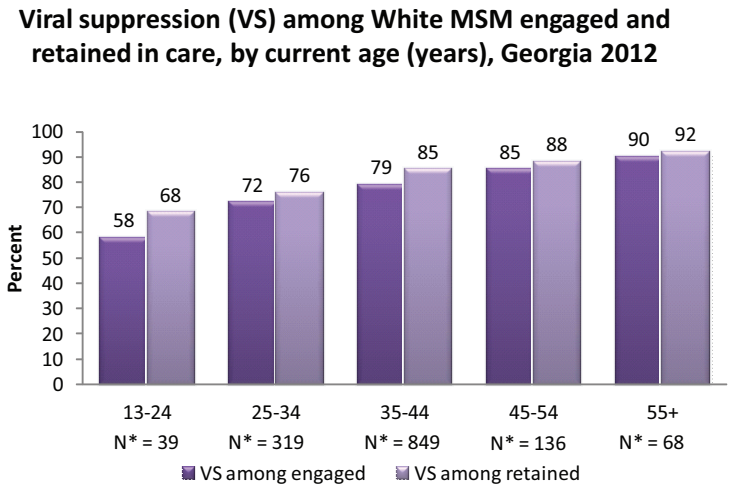
Figure 23 | Among Black MSM engaged and retained in care, disparity in viral suppression is seen by age. Viral suppression was lowest at 51% for the youngest age group retained in care, increasing to 84% for Black MSM over age 55.



*N= number retained in care

Note | Lack of viral suppression may reflect lack of prescribing of ART, failure of ART adherence, or inappropriate medication choice. An additional consideration is that although individuals are counted in this analysis as engaged and retained in care because of documented CD4 and VL values, these laboratory tests may have been drawn during a non-HIV-related hospitalization, or drawn prior to an HIV clinic appointment that was never kept. This may be an inadequate proxy for measuring HIV care.

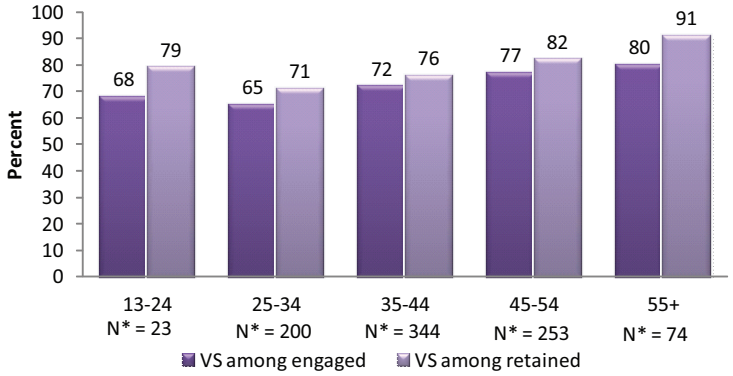
Figure 24 | Among White MSM engaged and retained in care, disparity in viral suppression is seen by age, but VS is higher than Black MSM in every age group. Viral suppression was lowest at 68% for the youngest age group retained in care, increasing to 92% for White MSM over age 55.



*N= number retained in care

Figure 25 | Among Hispanic/Latino MSM engaged and retained in care, disparity in viral suppression is seen by age. In contrast to Black and White MSM, however, among those retained in care, the youngest age group of 13-24 years has a higher proportion of viral suppression (79%) than ages 25-34 (71%) and ages 35-44 (76%). Among Hispanic/Latino MSM retained in care, viral suppression was highest for age 55 and older (91%).

Viral suppression (VS) among Hispanic/Latino MSM engaged and retained in care, by current age (years), Georgia 2012

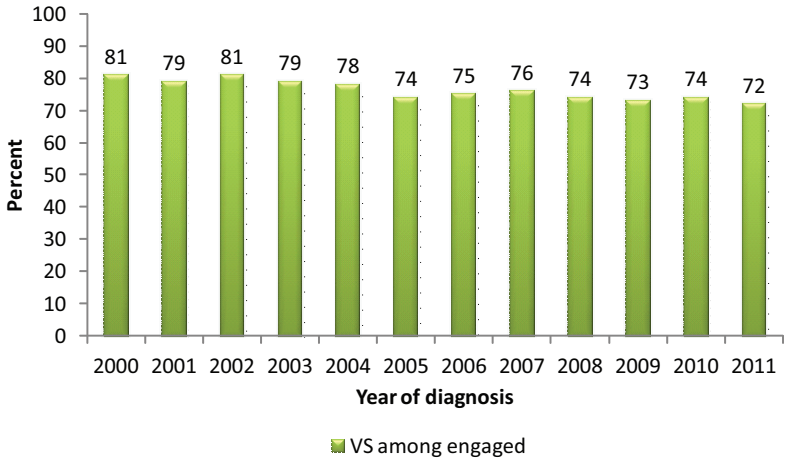


*N= number retained in care

Note | According to CDC's national statistics, MSM represent the only risk group with increasing HIV incidence in recent years. Achieving improved viral suppression in this group is important to individual health and to public health by reducing potential transmission.

Figure 26 | Viral suppression on the last viral load measured in 2012 among those engaged in care varies by diagnosis year from 72% (diagnosis year 2011) to 81% (diagnosis years 2000 and 2002). The average proportion of viral suppression among those engaged in care in 2012 is higher among those who have lived longer with an HIV diagnosis (79% for those diagnosed during the years 2000-2005) than those more recently diagnosed (74% for those diagnosed during the years 2006-2011).

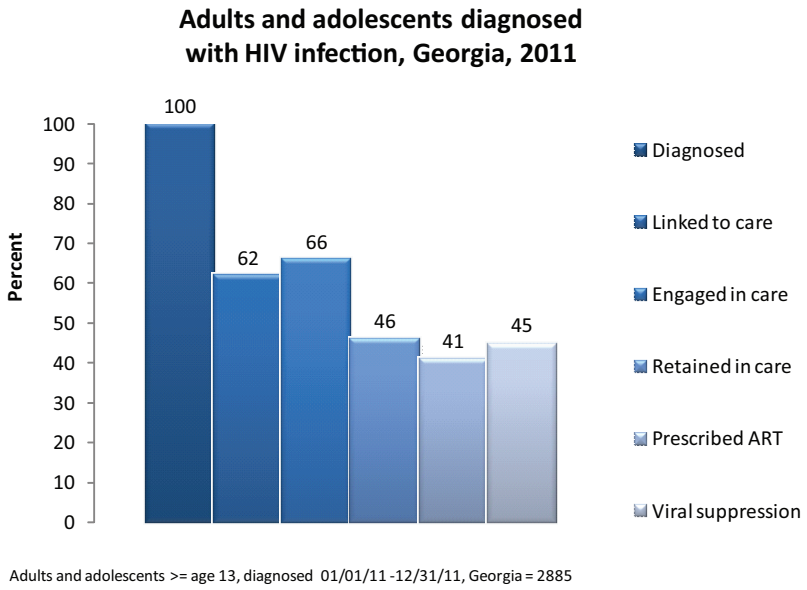
Viral suppression (VS) among adults and adolescents engaged in care, Georgia, 2012, by diagnosis year



Section Three

Care Continuum for persons diagnosed with HIV, Georgia, 2011

Figure 27 | This figure depicts the HIV Care Continuum for the 2885 adults and adolescents diagnosed with HIV infection in 2011 with residence at diagnosis in Georgia. Among those persons, 62% were linked to care within 3 months of diagnosis, 66% were minimally engaged in care with at least 1 CD4 or viral load (VL) 4-15 months after diagnosis, 46% retained in care with at least 2 CD4 or VL measures 4-15 months after diagnosis, 41% prescribed ART and 45% were virally suppressed.

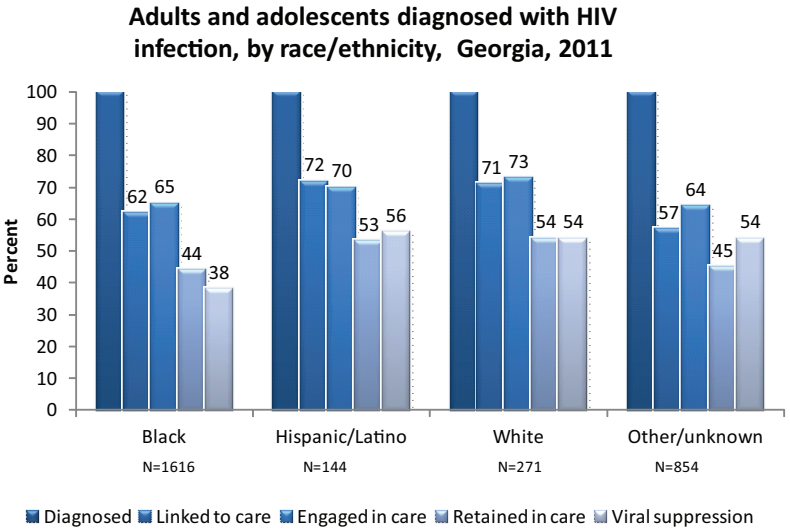


Note | Viral load measures are reported directly from laboratories licensed by Georgia to the Georgia Department of Public Health. The proportion of persons on ART is based on estimation from the sample enrolled in the Medical Monitoring Project (MMP) in Georgia. Subsequent figures omit ART estimates while a better source of such data is sought.

How can viral suppression be greater than percent prescribed ART? Viral load measures are reported directly from laboratories licensed by Georgia to the Georgia Department of Public Health. The proportion of persons on ART is based on estimation from the sample enrolled in the Medical Monitoring Project (MMP) in Georgia. Subsequent slides omit ART estimates while a better source of such data is sought.

All proportions are percent of total number of persons diagnosed with HIV in the category. Each bar is independent of the one preceding it. Hence it is possible for Engaged in Care to be greater than Linked to Care as seen here.

Figure 28 | Among 1,616 Blacks diagnosed with HIV infection in 2011 in Georgia and living as of 03/31/2013, 62% were linked to care within 3 months of diagnosis, 65% engaged, 44% retained and 38% virally suppressed. Among 144 Hispanic/Latinos, 72% were linked, 70% engaged, 53% retained and 56% virally suppressed. Among 271 Whites, 71% were linked, 73% engaged, 54% retained and 54% virally suppressed. Among 854 persons in the Other/Unknown Race category, 57% were linked to care within 3 months, 64% engaged, 55% retained and 54% virally suppressed.



Note | Because American Indian/Alaska Native, Asian, and Native Hawaiian/Other Pacific Islanders combined equal <2% of new diagnoses in Georgia, these groups are included in Other/Unknown category shown to the far right on this slide. Race was not reported for the great majority of persons included in the Other/Unknown category.

Figure 29 | Among 1,215 Black males diagnosed with HIV infection in 2011 in Georgia and living as of 03/31/2013, 59% were linked to care within 3 months of diagnosis, 63% were engaged, 42% were retained and 35% were virally suppressed. Among 112 Hispanic/Latino males, 72% were linked, 74% engaged, 56% retained and 56% virally suppressed. Among 216 White males, 73% were linked, 72% engaged, 52% retained and 55% virally suppressed.

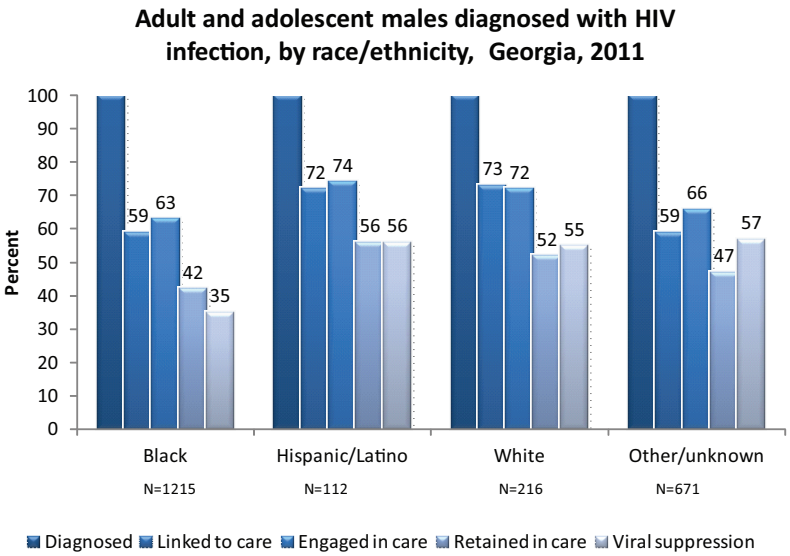


Figure 30 | Among 390 Black females diagnosed with HIV infection in 2011 in Georgia and living as of 03/31/2013, 72% were linked to care within 3 months of diagnosis, 71% engaged, 51% retained and 50% virally suppressed. Among 32 Hispanic/Latino females, 69% were linked, 56% engaged, 41% retained and 53% virally suppressed. Among 55 White females, 64% were linked, 76% engaged, 45% retained and 47% virally suppressed.

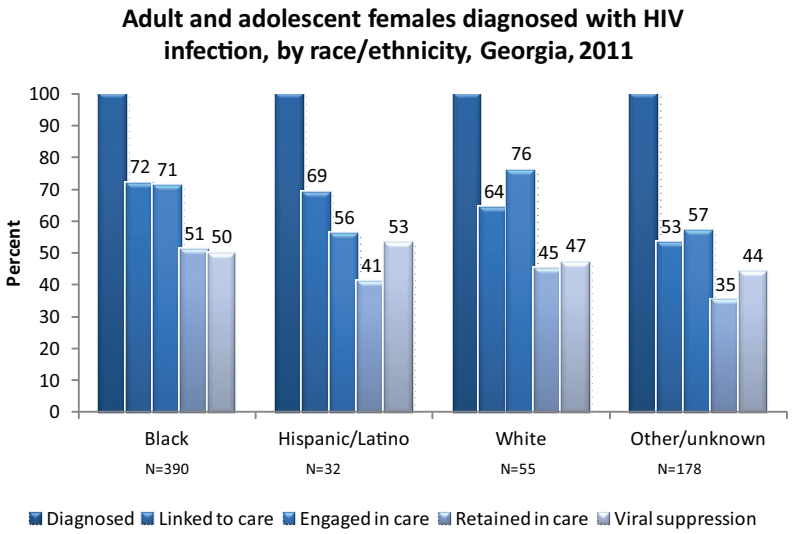


Figure 31 | Among those diagnosed with HIV in 2011, viral suppression on last viral load done 4-15 months after diagnosis is lowest (34%) in the youngest age group (age 13-24 years) and generally increases with increasing age to 54% for those aged 45-54 years and 52% for those aged 55 and older.

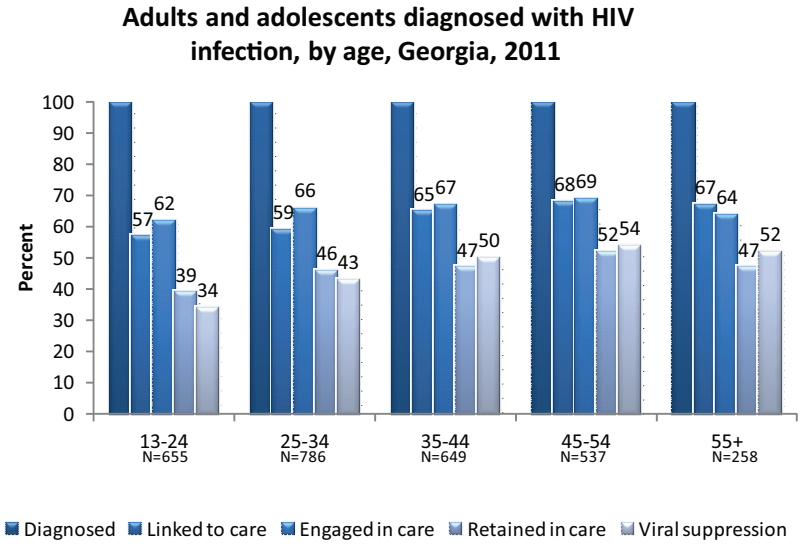
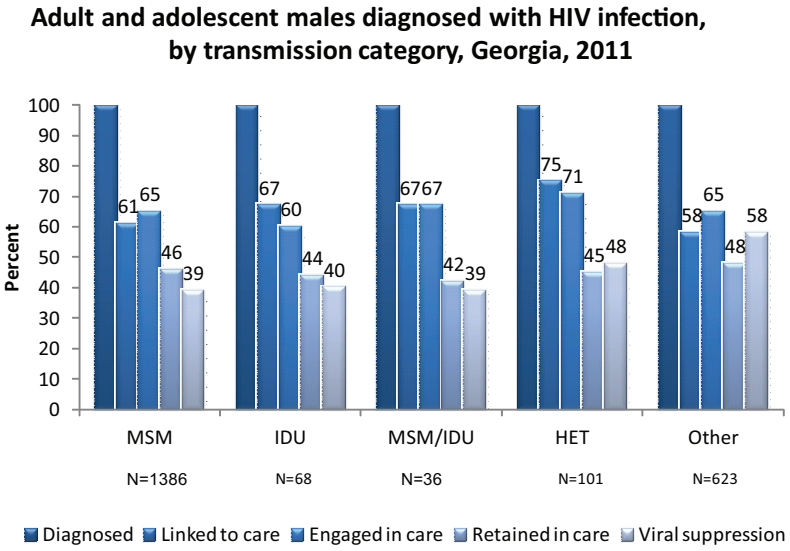


Figure 32 | In some groups the proportion increases from linked to engaged, which may reflect difficulty in accessing care within 3 months. Viral suppression is lowest among MSM and MSM/IDU (both 39%) and higher among HET (48%). Although the "Other" transmission category has the highest proportion of viral suppression (58%), this is difficult to interpret as no transmission category information was reported on most of the cases in this group.



Note | Multiple imputation is used to estimate the number of persons in each transmission category. Estimates are rounded to the nearest whole number and when totaled may not equal 2,214. Please note the small N for some categories (e.g., 36 males in the MSM/IDU transmission category) and use caution in interpretation.

Figure 33 | Viral suppression varies less for females than males by transmission category with 54% among IDU and 50% for HET. Viral suppression was lowest (42%) for those women for whom transmission category was not reported or identified, or was Other (including transmission via perinatal and blood product exposure. Multiple imputation is used to estimate number of persons in each transmission category. Estimates are rounded to the nearest whole number and when totaled may not equal 655.

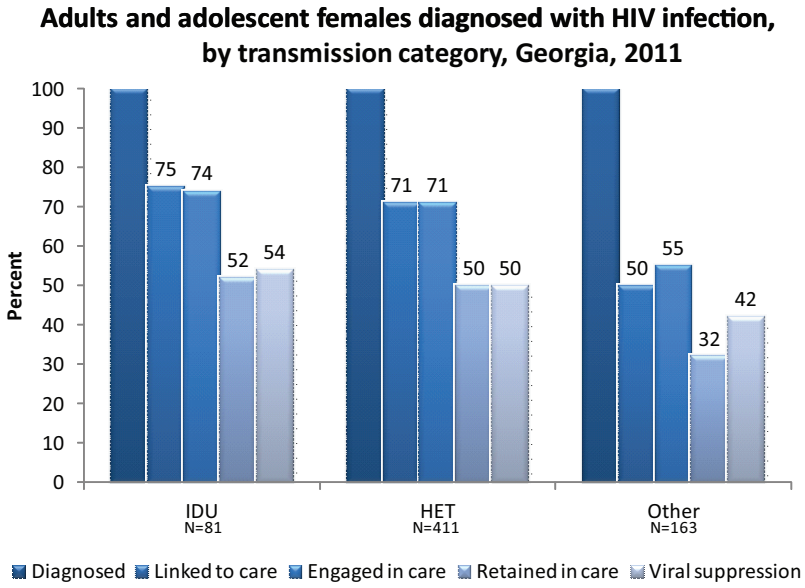
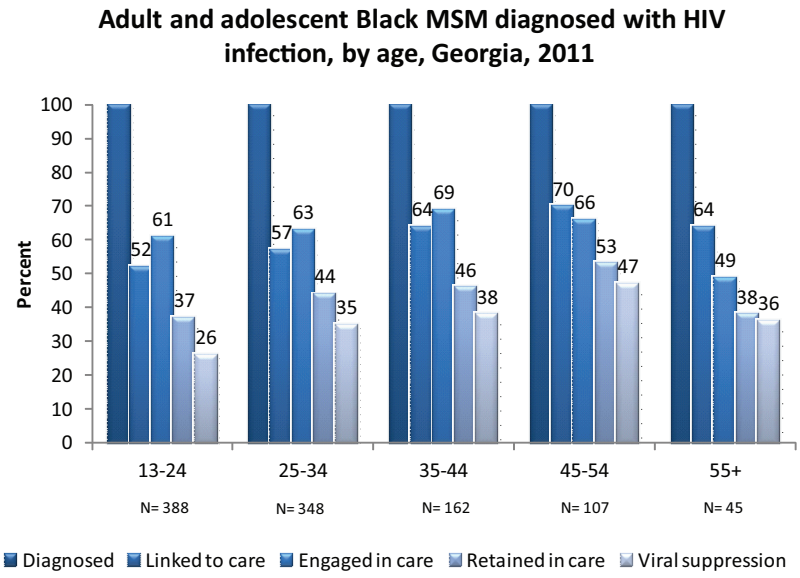


Figure 34 | The Care Continuum stratified by multiple variables can be useful to identify disparities among subgroups and to evaluate outreach efforts in testing, linkage and treatment for specific demographics. Please note the small N in some groups (e.g. 45 persons represented in the age 55+ years group) and use caution in interpretation.



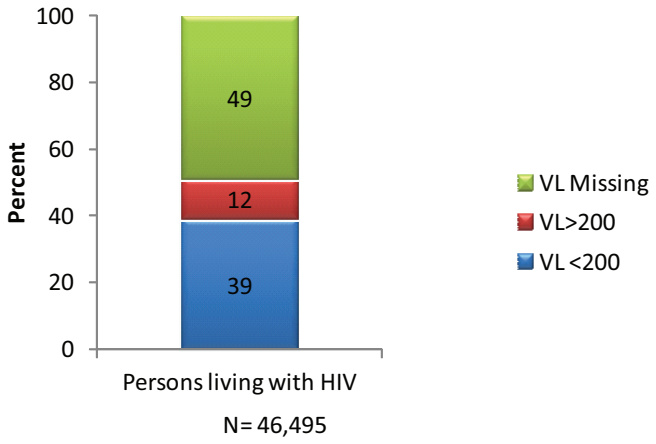
Section Four

Proportion of VL <200, VL >200 and VL missing among persons living with HIV, Georgia, 2012

In the Georgia Care Continuum, individuals with an undetectable viral load (VL) or VL<200 on the last measurement in 2012 are considered virally suppressed. Individuals with a VL >200 or who have had no VL measured in 2012 are considered to be not virally suppressed in the Georgia analysis as it is very unlikely to be out of care, not receiving ART, yet virally suppressed. The following figures depict the proportion of those with a VL<200, VL >200 or with no VL

Figure 35 | Viral suppression with a viral load undetectable or less than 200 copies/ml for persons living with HIV in Georgia in 2012 was 39% overall. Although 61% of persons living with HIV in Georgia in 2012 were not virally suppressed, 49% did not have a viral load measured in 2012 and were assumed to not be suppressed. Twelve percent had a viral load >200 on last measurement in 2012. Low proportions of viral suppression in Georgia reflect high numbers of persons living with HIV who have not had a viral load measured in 2010 and are presumed not engaged in HIV care.

Viral load (VL) among adults and adolescents living with HIV, Georgia, 2012



Adults and adolescents >= age 13, diagnosed by 09/30/2011, living 12/31/2012, Georgia = 46,495
VL<200 copies/ml = viral suppression
VL >200 copies/ml = no viral suppression
VL Missing = no apparent viral load measured in 2012

Figure 36 | Little difference is seen by sex in the proportions of viral load by known and missing viral loads. For the <1% (270/46,495) of persons for whom sex was not reported, only 30% are virally suppressed with 66% having no viral load measured in 2012.

Viral load (VL) among adults and adolescents living with HIV, by sex, Georgia, 2012

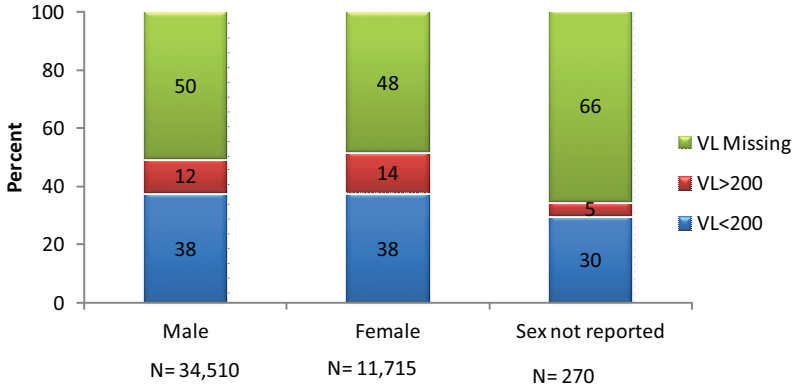


Figure 37 | The large proportion of unmeasured viral load is consistent across race/ethnicity. Both Blacks and Hispanic/Latinos had a higher proportion of VL>200 compared to Whites, with Blacks twice as likely to have a measured viral load >200 than Whites.

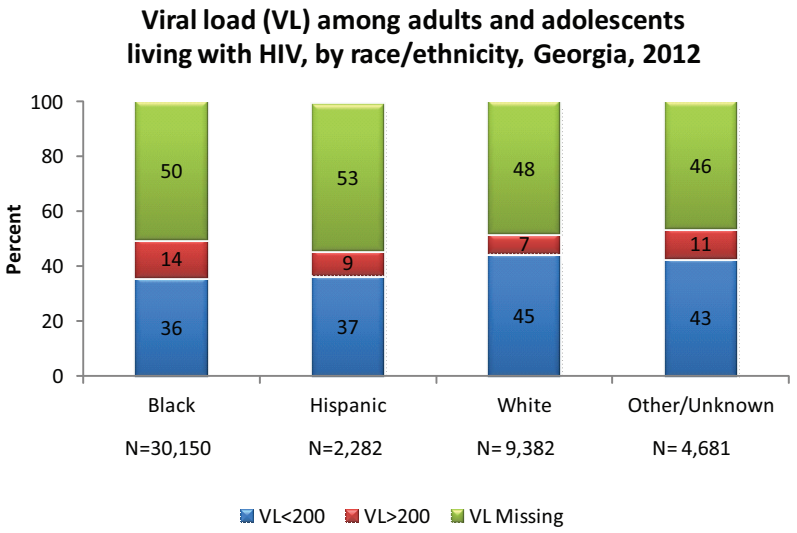


Figure 38 | Disparities in viral suppression are more pronounced when stratified by transmission category and sex. Sixty percent of male IDU had no measured VL in 2012. Among those who did have a viral load measured, VL >200 accounted for a small proportion of non-suppression, ranging from 9% (among IDU) to 12% (among MSM).

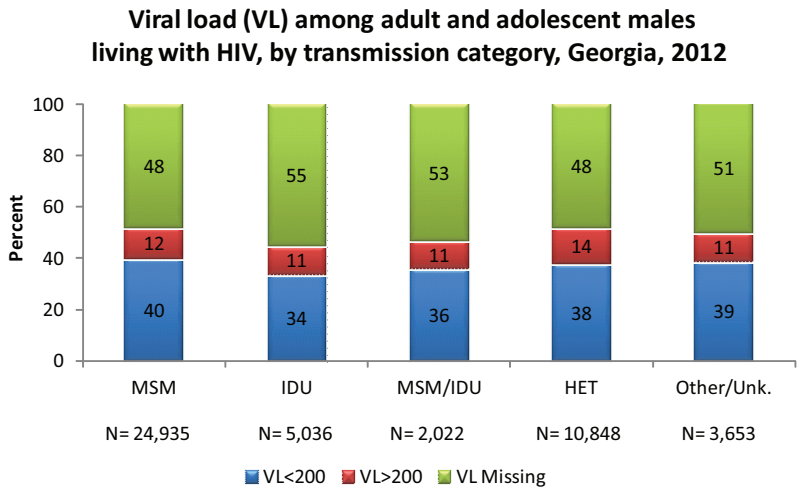


Figure 39 | Among women, little difference is seen in proportions of viral loads by suppressed, not suppressed and not measured stratified by transmission category. Approximately half of women living with HIV in Georgia did not have a viral load measured in 2012. Among those who did have a viral load measured, almost ¾ were virally suppressed.

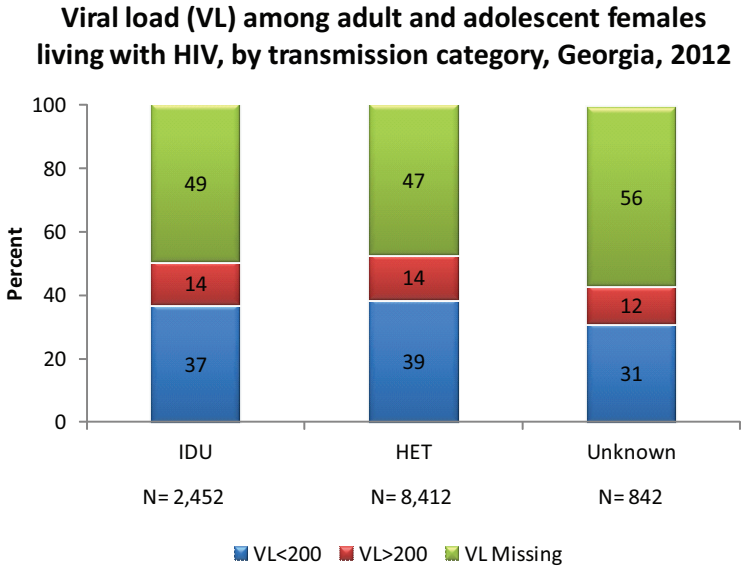


Figure 40 | Although approximately half of all persons living with HIV in Georgia did not have a viral load measured in 2012 regardless of age group, there is variability in the measured viral load results by age group. The percent of measured VL >200 is highest (23%) among persons age 13-24 years, and decreases with increasing age to only 7% among those age 55 and older.

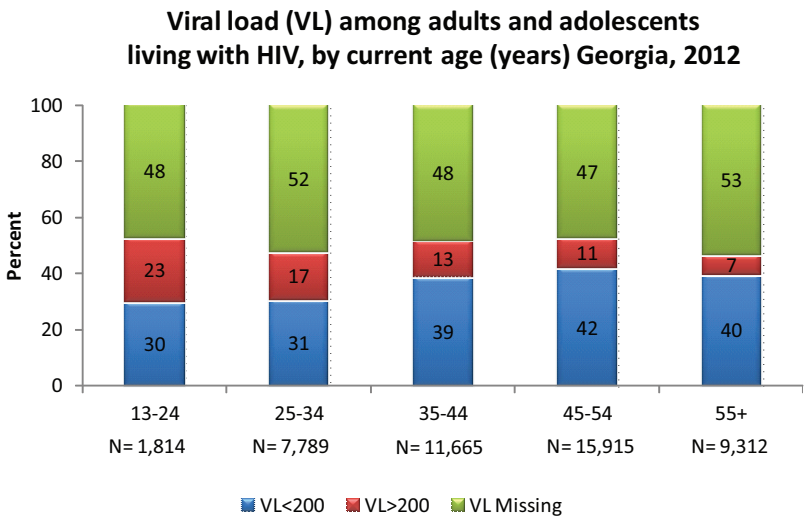


Figure 41 | Among Black MSM, stratified by age, unmeasured VL is fairly uniform ranging from 47-52%. VL >200 is highest among those aged 13-24 and decreases with increasing age.

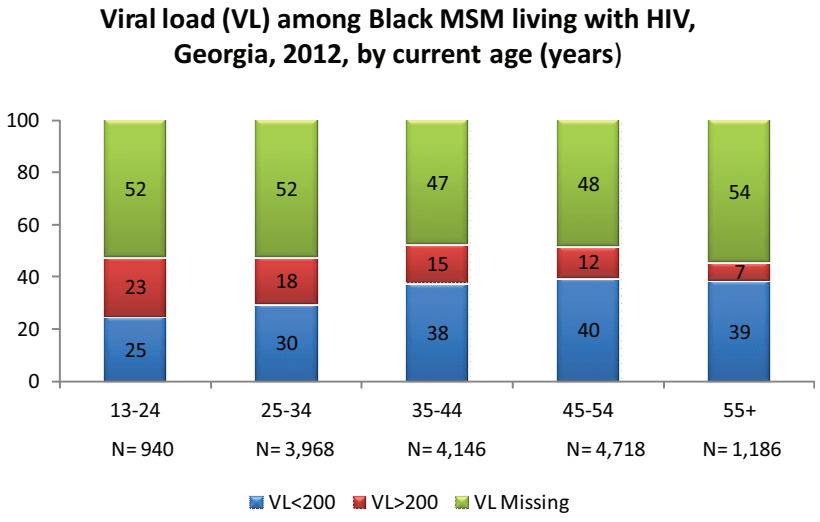


Figure 42 | Among White MSM, stratified by age, unmeasured VL is fairly uniform ranging from 44-50%. VL >200 is highest among those aged 13-24 and decreases with increasing age, a pattern also seen among Black MSM

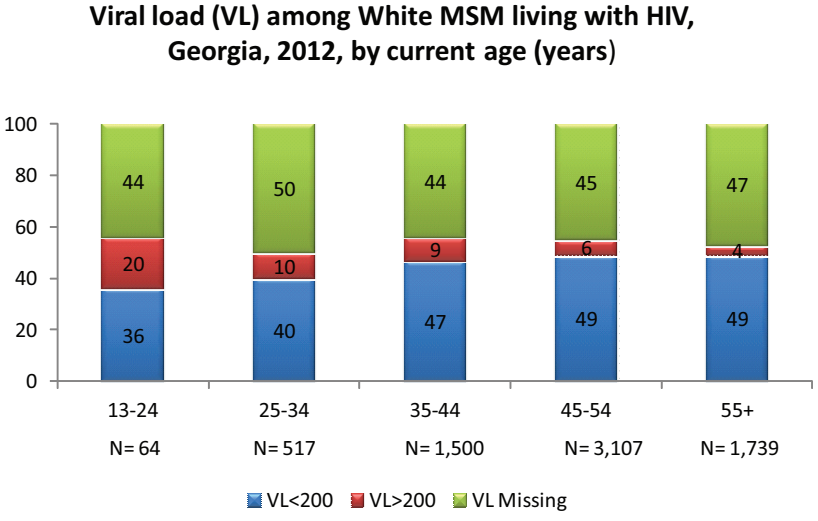
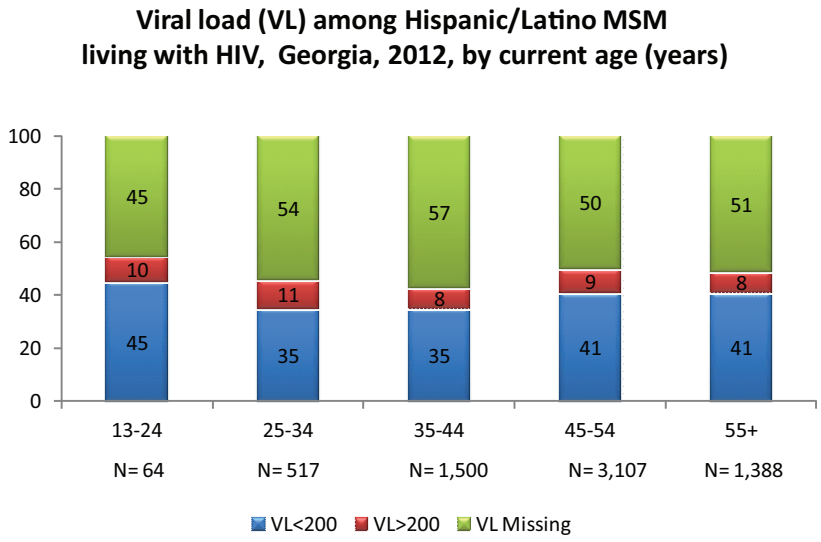


Figure 43 | Among Hispanic/Latino MSM in Georgia, a greater proportion had no measured VL in 2012 overall (45-57%) than among Black or White MSM. This may reflect unmeasured outmigration so that individuals may have moved to another state and be seeking care elsewhere.



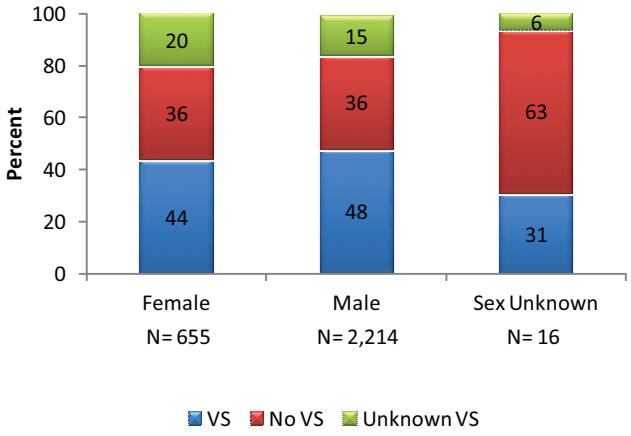
Section Five

Proportion of VL <200, VL >200 and VL missing on last viral load 2012 among persons diagnosed with HIV in Georgia in 2011

Overall, the proportion of VL missing is much lower for persons diagnosed with HIV in 2011 compared to persons living with HIV in Georgia 2012.

Figure 44 | Females are less likely than males to be virally suppressed 4-15 months after HIV diagnosis in 2011 (44% vs. 48%) with a higher proportion of missing VL (20% vs. 15%). For the less than 1% (16/2885) of persons for whom sex was not reported, only 31% are virally suppressed and 63% with VL >200 on last VL. Only 6% had no viral load measured in 2012.

Viral load (VL)* among adults and adolescents, diagnosed 2011, Georgia, by sex



Persons >= age 13, diagnosed 2011, alive 15 months after diagnosis, Georgia
*Most recent viral load measured 4-15 months after diagnosis

Figure 45 | Similar to viral loads among the prevalent population (persons living with HIV), Blacks newly diagnosed with HIV in 2011 were less likely to be virally suppressed than Hispanic/Latinos or Whites. Blacks had higher proportions of both VL>200 and VL missing than all other racial/ethnic groups.

Viral load (VL) among adults and adolescents, diagnosed 2011, Georgia, by race/ethnicity

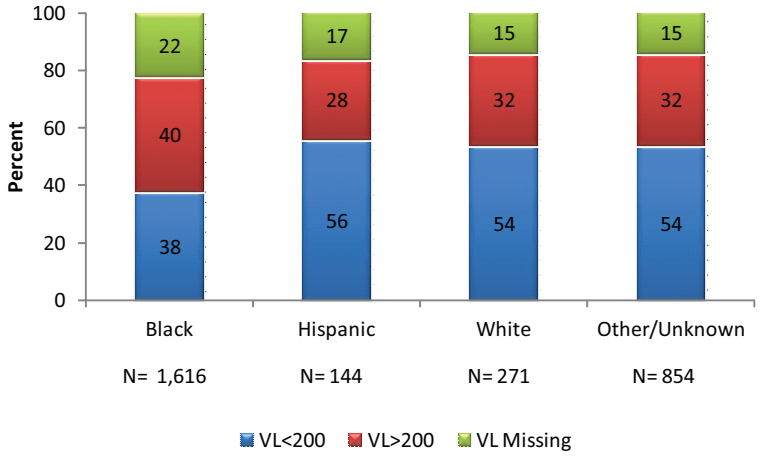


Figure 46 | The proportion of viral loads <200 (suppressed) and >200 (not suppressed) was approximately equal for MSM, IDU and MSM/IDU diagnosed in 2011. Viral suppression was highest among those in the heterosexual contact (48%) and Other/Unknown transmission categories (58%).

Almost 1 in 4 MSM, the largest group by transmission category diagnosed in 2011, did not have a VL measured 4-15 months after diagnosis.

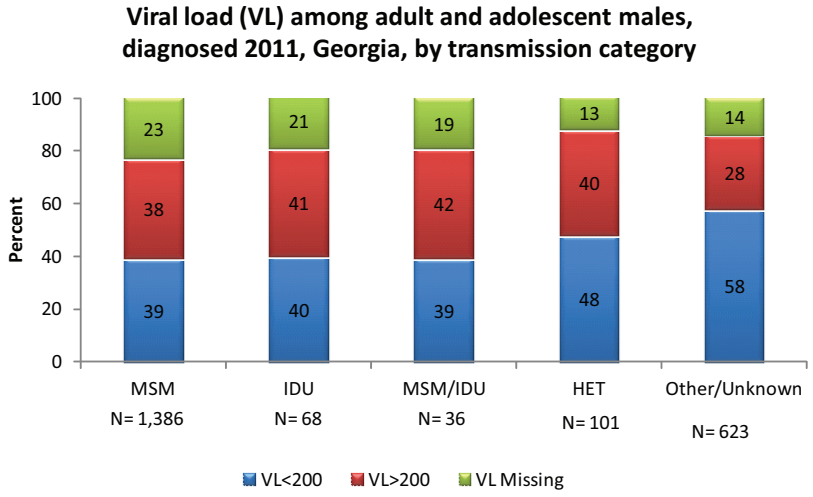


Figure 47 | Viral suppression was highest among women in the IDU transmission category (54%) with only 11% missing a VL 4-15 months after diagnosis, followed by HET with 50% viral suppression and 14% missing. Females with an unknown transmission category had a lower proportion of viral suppression (42%) and higher VL missing (20%).

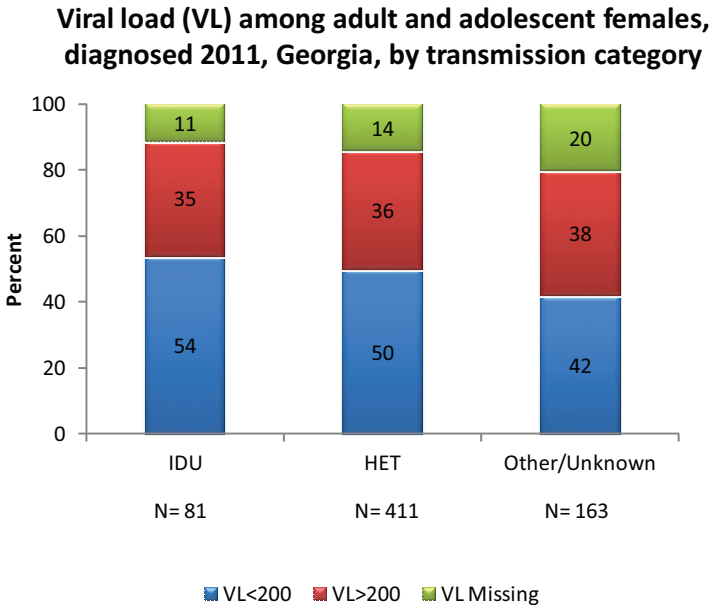
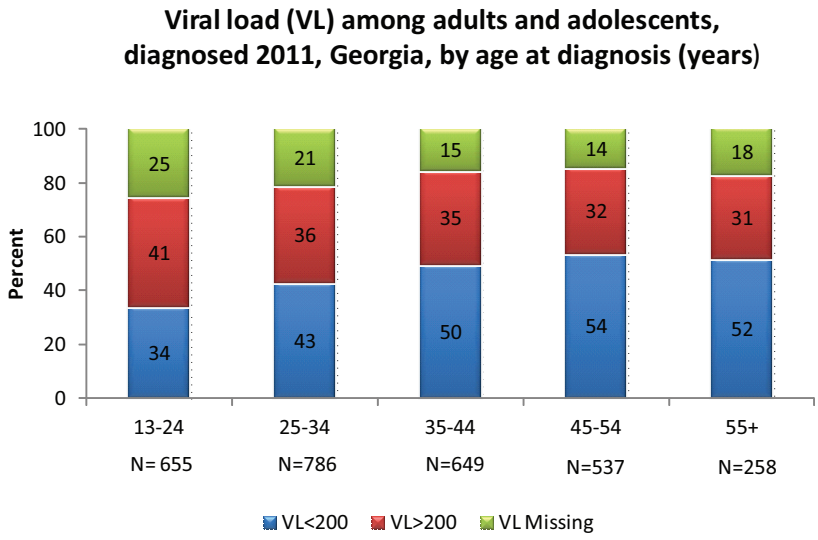


Figure 48 | Viral suppression increases with increasing age. The proportion VL missing decreases with increasing age but is lower overall for persons diagnosed in 2011 compared to persons living with HIV. A higher proportion of those aged 13-24 years at diagnosis in 2011 had VL > 200 (41%) than VL <200 (34%).



Section Six

Stage at diagnosis for persons diagnosed with HIV, Georgia, 2011

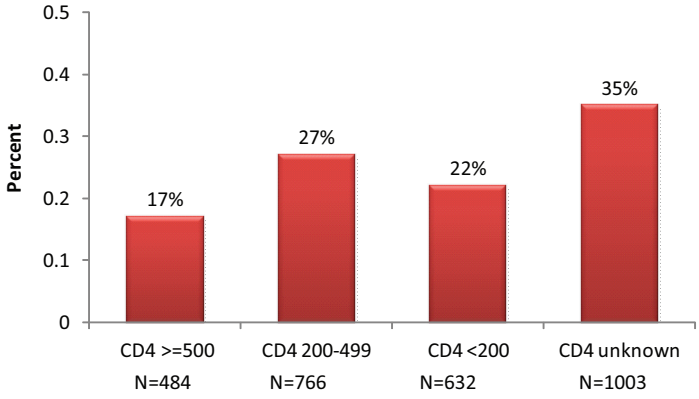
Late diagnosis

One measure of late diagnosis of HIV is to look at the stage of disease as defined by the earliest CD4 count measured at or within 12 months of diagnosis as follows:

- Stage 1 = CD4 >=500
- Stage 2 = CD4 200-499
- Stage 3 = CD4 <200 or an opportunistic infection (OI)
- Stage at diagnosis is unknown if no CD4 done within 12 months of diagnosis

Figure 49 | At least 17% of persons diagnosed in 2011 and living in Georgia were Stage 1 (CD4> 500 cells/ml), 27% Stage 2 (CD4 count 200-499 cells/ml) and 22% Stage 3 (CD4 less than 200 cells/ml) at diagnosis. Stage of disease within 12 months of diagnosis was unknown in 35%.

Stage of disease by earliest CD4 count within 12 months of HIV diagnosis, adults and adolescents, Georgia, 2011



Note | Because of the high proportion of missing, the 22% figure for persons with stage 3 disease (AIDS) at or within 12 months of diagnosis is a minimum and may be higher. Almost half (49%) of people diagnosed in 2011 living in Georgia, for whom the initial CD4 count is known were either stage 2 or 3 at or within a year of initial diagnosis.

Table 1 | **Number and proportion of adults and adolescents by stage at diagnosis by earliest CD4 count within 3 and 12 months after diagnosis, by race/ethnicity, Georgia, 2011**

Race/ Ethnicity	N	Stage 1 CD4>500		Stage 2 CD4 200-499		Stage 3 CD4 <200		Stage Unknown CD4 Missing	
		3 mos. N (%)	12 mos. N (%)	3 mos. N (%)	12 mos. N (%)	3 mos. N (%)	12 mos. N (%)	3 mos. N (%)	12 mos. N (%)
Black	1616	202 (13)	244 (15)	359 (22)	444 (27)	351 (22)	404 (25)	704 (44)	524 (32)
Hispanic/ Latino	144	15 (10)	18 (13)	39 (27)	43 (30)	48 (33)	50 (35)	42 (29)	33 (23)
White	271	50 (18)	54 (20)	66 (24)	78 (29)	68 (25)	76 (28)	87 (32)	63 (23)
Other/ Unknown	854	151 (18)	168 (20)	185 (22)	201 (24)	94 (11)	102 (12)	424 (50)	383 (45)

Figure 50 | The highest proportion of late diagnosis is seen among Hispanic/Latinos, who had at least 35% at Stage 3 (AIDS) at or within 12 months of diagnosis. The highest proportion of Stage Unknown is found among persons for whom race/ethnicity was not reported (45%). American Indian/ Alaska Native, Asian and Native Hawaiian/Pacific Islander groups together constitute <2% of adults diagnosed with HIV in Georgia, 2011 and are grouped with other/unknown race/ethnicity. Improved case reporting including race, sex and transmission category is critical to accurate characterization of the HIV Care Continuum in Georgia

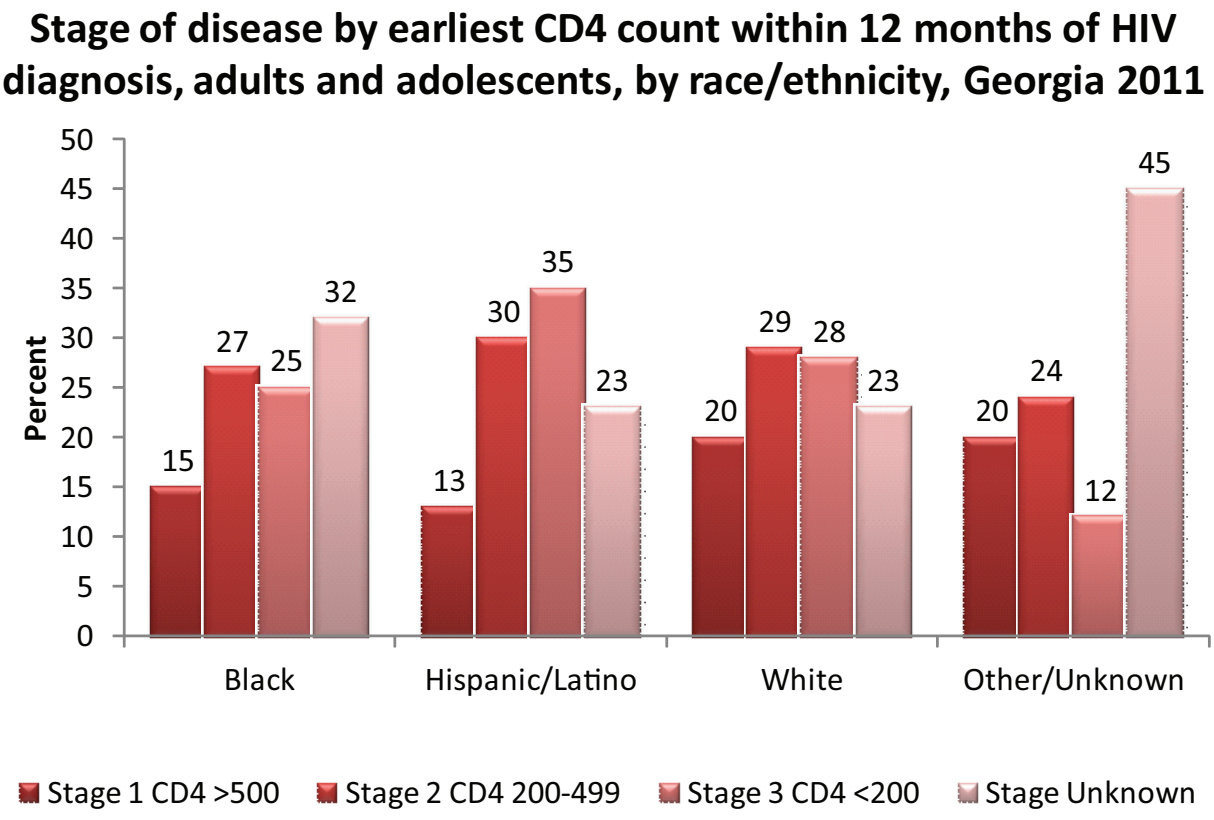


Figure 51 | The high proportion of Stage Unknown (36% for men, 32% for women) within 12 months of diagnosis limits comparison by sex. However, based on the known stage, at least 21% of men and 25% of women in Georgia with HIV had stage 3 disease (AIDS) at or within 12 months of diagnosis.

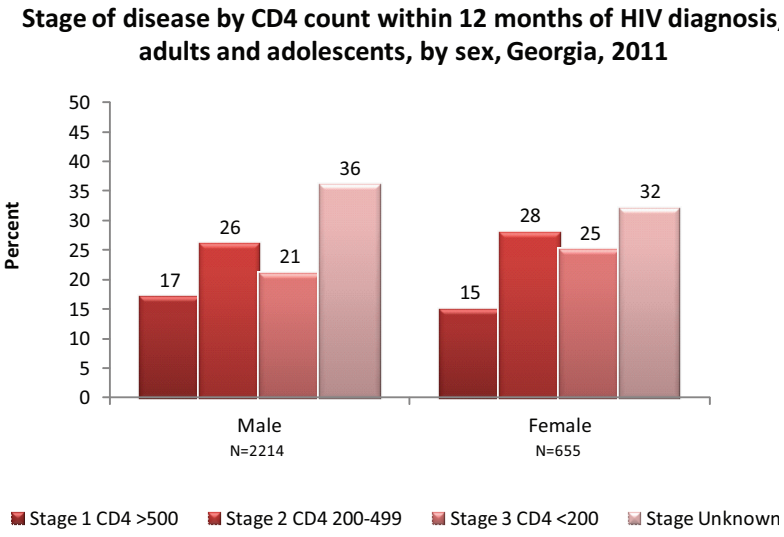


Figure 52 | Although the high proportion of Stage Unknown limits comparison with other groups, the known proportions indicate that at least 23% MSM, 46% IDU, 25% MSM/IDU and 46% HET transmission category had stage 3 (AIDS) disease at or within 12 months of diagnosis. Multiple imputation is used to estimate number of persons in each transmission category. Estimates are rounded to the nearest whole number and when totaled may not equal 2214.

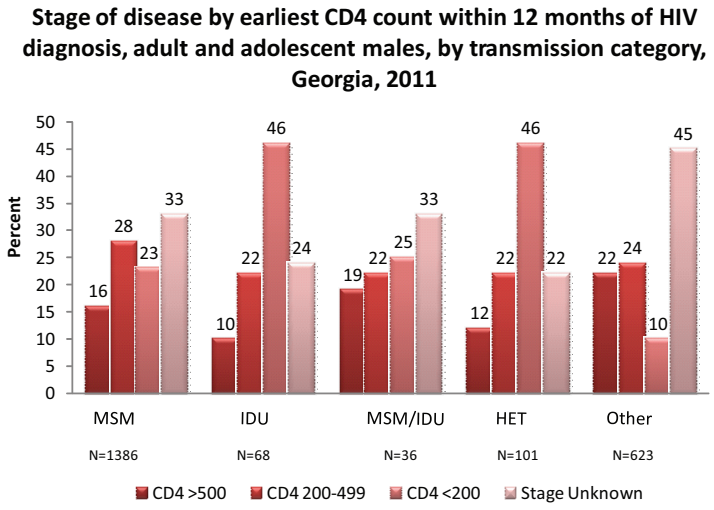
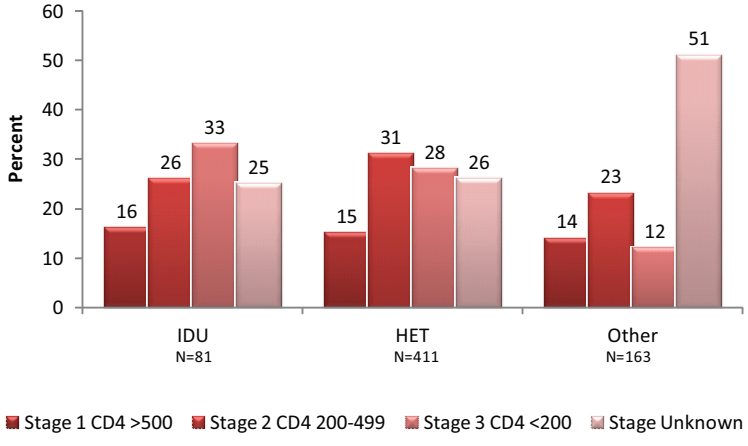


Figure 53 | Although the high proportion of Stage Unknown limits comparison with other groups, the known proportions indicate that at least 33% IDU and 28% HET transmission category had stage 3 (AIDS) disease by earliest CD4 within 12 months of diagnosis. Multiple imputation is used to estimate number of persons in each transmission category. Estimates are rounded to the nearest whole number and when totaled may not equal 655.



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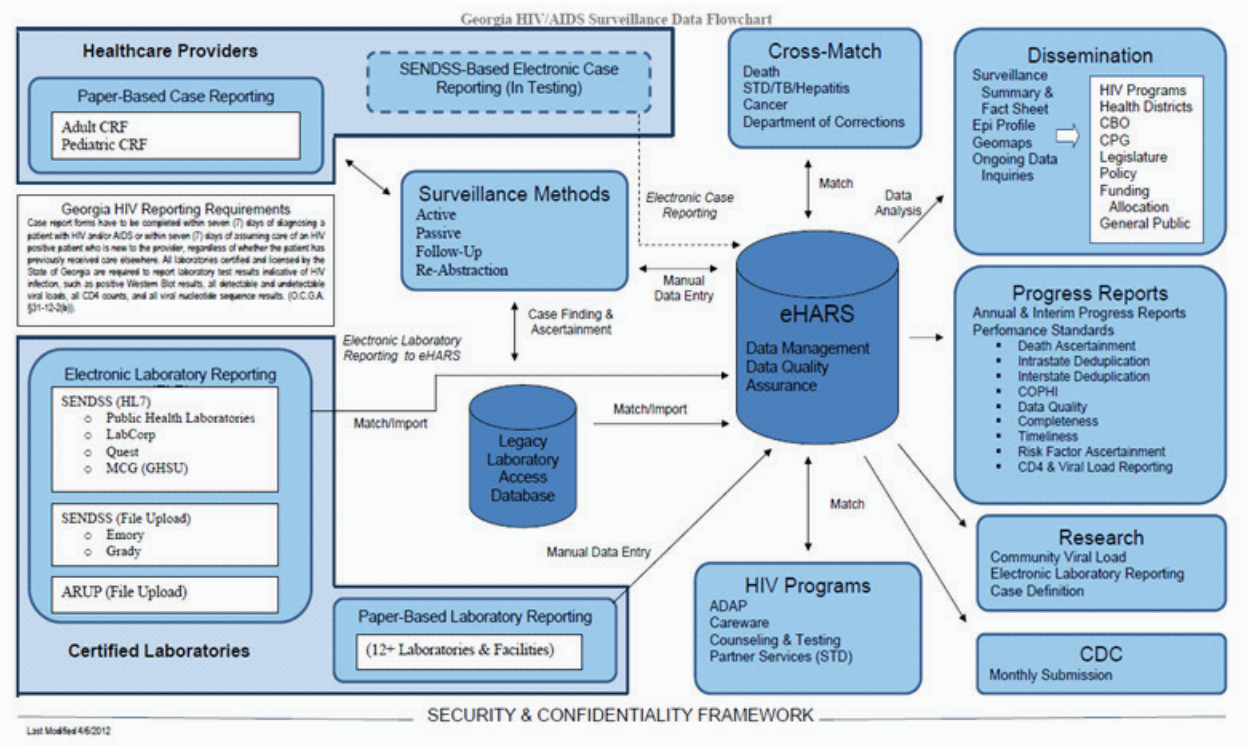
Appendix A | Georgia HIV/AIDS Surveillance Data Flowchart



GEORGIA ADULT HIV/AIDS CONFIDENTIAL CASE REPORT FORM

(Patients ≥ 13 years of age at time of diagnosis)

Mail completed form to: Georgia Department of Public Health, Epidemiology Section P.O. Box 2107 Atlanta, GA 30301
For additional information: Phone: 1-800-827-9769 or visit our website at http://health.state.ga.us/epi/hivaids

All health care providers AND HIV/AIDs testing sites diagnosing and/or providing care to a patient with HIV are obligated to report using Georgia HIV/AIDS Case Report. Case reports should be completed within seven (7) days after diagnosing or providing care to a patient with HIV/AIDS. Providers are required to submit reports on any patient new to his or her care, regardless if they have previously received care elsewhere

Date Form Completed: / /

State # (GDPH Use Only):

I. Patient Name (last name, first name, and middle initial) **and Address.**

Patient's Name:	Alias/Maiden:	Phone No. :

Current Address:	City:	County:	State:	ZIP Code:

Counseling & Testing No.	Other ID No. Type (e.g Ryan White,TB, ETC)	Social Security Number (SSN) :	Country:
		- -	

II. Demographic Information

Diagnostic Status at Report:
- ☐ HIV infection (not AIDS)
- ☐ AIDS

Date of Birth: Month / Day / Year

Sex at Birth:
- ☐ Male
- ☐ Female
- ☐ Unknown

Current Gender Identity:
- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Male to Female
- ☐ Female to Male

Country of Birth:
- ☐ Unknown

Alias Date of Birth: Month / Day / Year

Vital Status:
- ☐ Alive
- ☐ Dead
- ☐ Unknown

Date of Death: Month / Day / Year

State of Death:

Race:
- ☐ American Indian or Alaska Native
- ☐ Native Hawaiian / Other Pacific Islanders
- ☐ Asian
- ☐ Black or African American
- ☐ White
- ☐ Unknown

Ethnicity:
- ☐ Hispanic/Latino
- ☐ Non-Hispanic/Latino
- ☐ Unknown

Residence at Diagnosis

Address:		City:
State/Country:	County:	ZIP Code:

Residence of Diagnosis for:
- ☐ HIV
- ☐ AIDS

☐ **Same address as current address**

III. Facility

- ☐ AIDS diagnosis
- ☐ HIV diagnosis

Facility of Diagnosis:

Address	City	County	State/Country	ZIP Code

Provider Name:

Provider Specialty:

Provider Phone No. - -

Patient's Medical Record No.

Person Completing Form:

Phone No.

Facility of Person Completing Form (If different from Diagnostic facility):

Address City: County Zip code

IV. Patient History

Preceding the first positive HIV antibody test or AIDS diagnosis, this patient had (respond to all categories):	YES	NO	UNK.
• Sex with male	☐	☐	☐
• Sex with female	☐	☐	☐
• Injected non-prescription drugs	☐	☐	☐
• **HETEROSEXUAL relations with any of the following:**			
Intravenous/injection drug user	☐	☐	☐
Bisexual male	☐	☐	☐
Person with AIDS or documented HIV infection, risk not specified	☐	☐	☐
• Received transfusion of blood/blood components (other than clotting factor) (document reason in the Comments section)	☐	☐	☐
First date received ☐ Last date received ☐			
• Worked in a healthcare or clinical laboratory setting specify occupation and setting (if applicable):	☐	☐	☐
☐Other risk ☐Transplant ☐Received clotting factor describe other risk:☐	☐	☐	☐

V. DOCUMENTED LABORATORY DATA

HIV Antibody Tests at Diagnosis (FIRST positive test)

	+	-	Indet	Mon	DAY	YR
HIV-1 EIA	☐	☐	☐			
HIV-1/2 EIA	☐	☐	☐			
HIV-1 Western Blot	☐	☐	☐			
Other (IFA, HIV-1/2 Ag/Ab)	☐	☐	☐			

Earliest Positive HIV Detection

☐ Qual PCR DNA ☐p24 antigen			
☐Qual PCR RNA ☐NAAT			

CD4 Count

	cells/il	%	Mon	DAY	YR
At or closest to HIV diagnosis					
First <200 or <14% OR at first AIDS OI					

Detectable HIV Viral Load

	Type	Copies/mL	Mon	DAY	YR
Earliest					
Most Recent					

Specify Type:**1**-NASBA, **2**-RT-PCR (standard) **3**-RT-PCR (ultrasen) **4**-bDNA-v. 2 **5**-bDNA-v. 3 — **Mon** | **DAY** | **YR**

Physician Diagnosis: If HIV lab tests were not documented, is HIV diagnosis documented by a physician? ☐**Yes** ☐**No**

VI. TREATMENT

	Yes	No	Unk
Is patient aware of HIV/AIDS Infection?	☐	☐	☐
Receiving or has been referred for HIV medical services?	☐	☐	☐
Receiving or has been referred for Substance Abuse services?	☐	☐	☐
Receiving Anti-retroviral therapy?	☐	☐	☐

Current Co-Infection? Date of Diagnosis.

- ☐ Hepatitis (B or C) Date: ☐
- ☐ TB Date: ☐
- ☐ Gonorrhea/ Chlamydia Date: ☐
- ☐ Syphilis Date: ☐

HIV medical Treatment Reimbursed?

- ☐ None
- ☐ Medicaid
- ☐ Medicare/Medicaid
- ☐ Clinical Trial
- ☐ Private Insurance
- ☐ Other
- ☐ Unknown

VII. For Female Patient

Is this patient currently pregnant?
☐Yes ☐No ☐Unknown

If **YES**, enter expected date of delivery: ☐/☐/☐

This patient is receiving or has been referred for gynecological or obstetrical services:

☐Yes ☐No ☐Unknown

If **YES**, enter OB/GYN:

☐

Has this patient delivered live-born infants?
☐Yes ☐No ☐Unknown

If **YES**, enter Name and DOB:☐

VIII. Comments (Please list any AIDs Related Opportunistic Infections, test, etc…)

Appendix C | HIV Surveillance and Reporting Law in Georgia

Complete and timely reporting of HIV infection cases by is critical for monitoring the epidemic in Georgia and ensuring federal funding for public sector HIV prevention, care and treatment services since funding allocation is directly linked to the number of cases

- Georgia Department of Public Health (DPH), HIV/AIDS Epidemiology Program (HAEP) is responsible for monitoring the HIV epidemic in the state using the enhanced HIV/AIDS Reporting system to collect, manage, analyze and report surveillance data to Centers for Disease Control and Prevention

- Georgia began collecting AIDS case reports in the early 1980s. HIV (not AIDS) reporting was mandated in Georgia on December 31, 2003

- Georgia law (OCGA § 31-22-9.2) requires health care providers to submit a confidential case report for patients diagnosed with HIV infection within seven days of diagnosis to the Georgia DPH HAEP.

- Case report forms are mandated to be completed within seven (7) days of diagnosing a patient with HIV and/or AIDS or within seven (7) days of assuming care of an HIV positive patient who is new to the provider, regardless of whether the patient has previously received care elsewhere.

- All laboratories certified and licensed by the State of Georgia are required to report laboratory test results indicative of HIV infection, such as positive Western Blot results, all detectable and undetectable viral loads, all CD4 counts, and all viral nucleotide sequence results to the Georgia DPH HAEP.

February 2014

FOR MORE INFORMATION CONTACT:

Georgia Department of Public Health

HIV/AIDS Epidemiology Program

http://health/state.ga.us/epi/hivaids

OTHER RESOURCES:

www.AIDSVu.org

www.cdc.gov/hiv